

NETA

COMMUNICATIONS



- **GNSS /FTS/ TELEMETRY**
ANTENNAS

- **CONFORMAL**
ANTENNAS

- **AIRBORNE AND GROUND DATA LINK**
ANTENNA SYSTEMS

- **VSAT AND SOTM**
ANTENNA SYSTEMS

NETA

NETA Communications is a design and manufacturing company specialized especially on antenna and RF products with a broad range of applications of telemetry, GNSS, FTS, airborne and ground data link and satellite communication. All products are designed by own R&D center and produced by NETA production facilities in Istanbul Turkey. There are more than 150 employees including many Phd and postgraduate engineers.

Together with off-the-shelf products, NETA does custom designs where platform and application specific conditions are important. Conformal antennas are such applications where they are designed and optimized for a specific platform such as fuselage of an airplane.

Beside the antenna products, NETA also develops antenna systems where the signal search and track are also performed especially for LOS (Line of Sight) and satellite applications. Data Link system is an end to end solution for UAV's. The Ground Data Terminal and Air Data Terminal are both ends of the system where antenna, RF and modem components are all supplied as turn key solution.

R&D

Within the R&D; there are antenna and RF, electronics, software and mechatronics design teams. The main products are the antennas developed in conformal, wrap around and blade types with omni or directional characteristics. There are also parabolic, cassegrain, slotted waveguide structures at frequencies ranging from UHF, L-band, S-band, C-band, Ku-band up to Ka-band.



PRODUCTION

NETA has two production lines as electronics and mechanics. All electronic cards manufactured with SMT (Surface Mount Technology) within the production line. The systems are assembled and tested in system production line. All antenna products are applied to signal conditions and detailed characteristics are measured.



TEST CENTER

NETA has also an in-house test center ensuring products meet certain requirements for environmental conditions for MIL-STD and commercial standards.

NETA has ISO9001-2015 Quality Management System, ISO27001:2013 Information Security Management, ISO10002:2018 Customer Satisfaction Management, National and NATO Facility Security Clearance Certificates.

EXPORT

Neta is exporting to more than 30 countries including most European countries, UK, Russia, Australia, Arab and African countries. We keep close relations with our customers to understand their requirements and to offer them the best solutions.



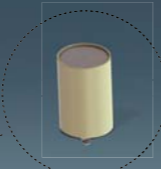
UHF Omni Blade Antenna



S Band Omni Blade Antenna



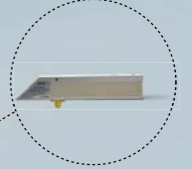
6-18 GHz Spiral Antenna



Passive L1GPS Antenna



UHF Flight Termination Antenna



Conformal GNSS Antenna



Airborne Data Link Antenna



Ku Band Omni Antenna

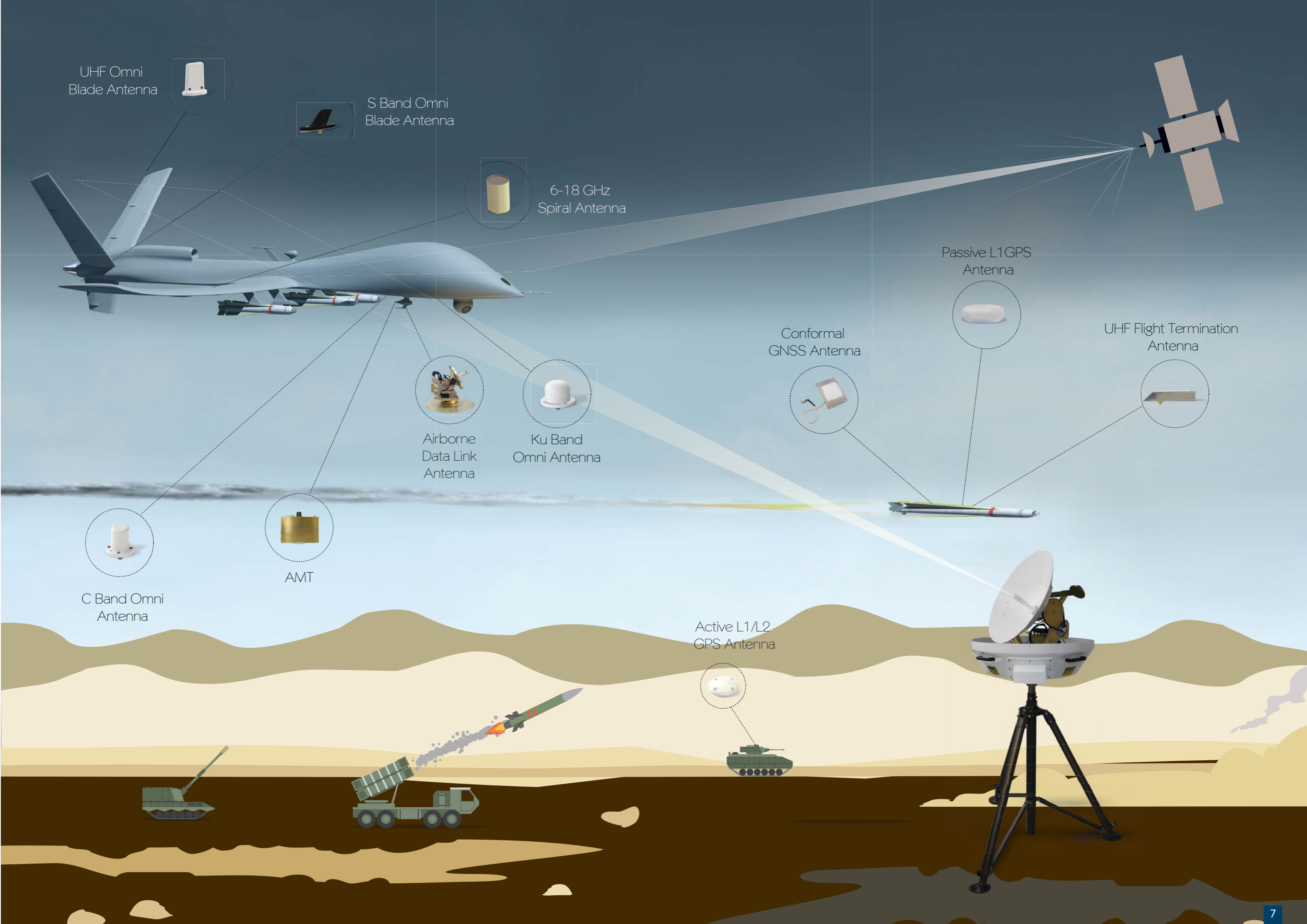


AMT



C Band Omni Antenna

Active L1/L2 GPS Antenna



AIRBORNE AND GROUND DATA LINK ANTENNA SYSTEMS



Ground Data Link Antenna System



Features

- Data, Telemetry and Video Link Communication
- Line Of Sight Connection
- Airbone and Misslle Test Applications
- Autotrack Performance on High Dynamic Targets
- Tripod or Telescopic Mast Mount
- High Efficient Antenna
- Ku/C/S band options
- Fast Signal Acquisition
- GPS and/or RSSI tracking

Ground Data Link Antenna System is used for the data link applications between an airborne platform and ground station. It has Ku band, C band or S band reflector antenna together with positioner to point the antenna. Via an Ethernet connection it receives the ECEF coordinates of the airborne platform and positions its antenna to correct direction. The positioner is mounted on a tripod or a telescopic mast. The system has its own GPS to find its coordinates. It can find the target by directly pointing to GPS coordinates received or by performing a blind scan. When the target is found it tracks it by using GPS coordinates or by ussing the RSSI of the signal. Even if the link is broken for a few seconds the system continiues to track the target by predicting the aircraft location obtained from the previous coordinates.

Antenna Specifications Ku band

Reflector	63 cm High Performance Gregorian Cassegrain
Frequency	Ku Band (ask for more details)
Polarisation	RHCP
Gain	38.2 dBi
HPBW	1.9°
VSWR	1.5:1

Antenna Specifications C band

Reflector	63 cm High Performance Gregorian Cassegrain
Frequency	C band (ask for more details)
Polarisation	Linear or Dual Linear
Gain	27 dBi
HPBW	8°
VSWR	2:1

Antenna Specifications S band

Reflector	60 cm Reflector Cassegrain
Frequency	S band (ask for more details)
Polarisation	Linear or Dual Linear
Gain	21 dBi
HPBW	14°
VSWR	2:1

Antenna Specifications UHF/ L /S band

Reflector	65 cm dual Reflector Cassegrain
Frequency	0.860-1 GHz @ UHF Band 1.7- 2.5 GHz @ L and S band
Polarisation	Lineer @ UHF Band Dual Lineer @ L and S band
Gain	13.5 dB @ UHF Band 18-20 dB @ L and S band
HPBW	32° 18°-13° @ L and S band
VSWR	2:1

Positioner Specifications

Azimuth Range	360° continuous
Elevation Range	-10 ~ +90°
Speed	90 °/sec
Acceleration	150 °/sec ²
Pointing Accuracy	< 0.4° RMS
External Interfaces	RS232, RS 422
Positioner Connection	SMA and circular connector for power and data
Software Update	RS232, RS 422
Power	18-32 VDC
Tracking Source	GPS and/or RSSI
Control Interface	RS232, RS 422

Mechanical

Dimensions	Ø 820x800mm
Weight	40 kg
Operating Temperature	-40° ~ +80°C

Environmental and Functional Tests

Low Temperature	MIL-STD-810F Method 502.4 Procedure-1
High Temperature	MIL-STD-810F Method 501.4 Procedure-1
Temperature Shock	MIL-STD-810F Method 503.4 Procedure-1
Low Pressure	MIL-STD-810F Method 500.4 Procedure-1
Acceleration	MIL-STD-810F Method 513.5 Procedure-2
Mechanic Shock	MIL-STD-810F Method 516.5 Procedure-1
Humidity	MIL-STD-810F Method 507.4
Vibration	MIL-STD-810F Method 514.5 Procedure-1

AIRBORNE AND GROUND DATA LINK ANTENNA SYSTEMS

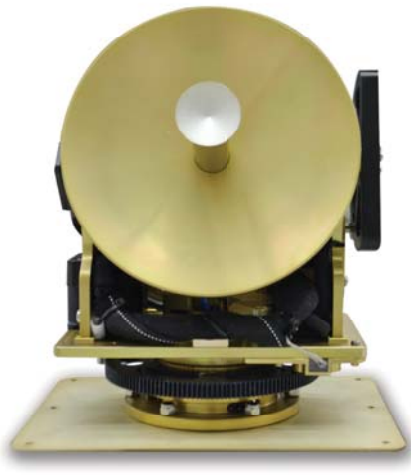


Airborne Data Link Antenna System

Features

- Data, Telemetry and Video Link Communication
- Line of Sight Connection
- Airborne Applications
- Autotrack Performance on High Dynamic Platforms
- High Efficient Antenna
- Ku Band
- Fast Signal Acquisition
- GPS and/or RSSI tracking

Two Axis Airborne Data Link Antenna System is used for the data link applications between an airborne platform and ground station. It has Ku band reflector antenna together with two axis pedestal to point the antenna. It can acquire the ground station signal by directly pointing to GPS coordinates or by performing a blind scan. When the link is maintained it tracks the signal by using GPS coordinates or by using the RSSI of the signal. Even if the link is broken for a few seconds the system continues to track the signal direction by predicting the aircraft location obtained from the previous coordinates.



Antenna Specifications

Reflector	15 cm High Performance Cassegrain Reflector
Frequency	Ku Band (ask for more details)
Polarisation	RHCP
Gain	24 dBic
HPBW	8°
VSWR	1.5:1

Positioner Specifications

Azimuth Range	360° continuous
Elevation Range	-15 ~ +95°
Speed	90 °/sec
Acceleration	90 °/sec ²
Pointing Accuracy	< 0.4° RMS
External Interfaces	RS232, RS422
Pedestal Connection	SMA and circular connector for power and data
Software Update	RS232, RS422
Power	18-32 VDC
Tracking Source	GPS and/or RSSI
Control Interface	RS232, RS422

Mechanical

Dimensions	Ø220 x 230mm
Weight	< 3 kg
Operating Temperature	-40° ~ +70°C

Environmental and Functional Tests

Low Temperature	MIL-STD-810F Method 502.4 Procedure-1
High Temperature	MIL-STD-810F Method 501.4 Procedure-1
Temperature Shock	MIL-STD-810F Method 503.4 Procedure-1
Low Pressure	MIL-STD-810F Method 500.4 Procedure-1
Acceleration	MIL-STD-810F Method 513.5 Procedure-2
Mechanic Shock	MIL-STD-810F Method 516.5 Procedure-1
Humidity	MIL-STD-810F Method 507.4
Vibration	MIL-STD-810F Method 514.5 Procedure-1

AIRBORNE AND GROUND DATA LINK ANTENNA SYSTEMS



LTE Band Array Antenna System

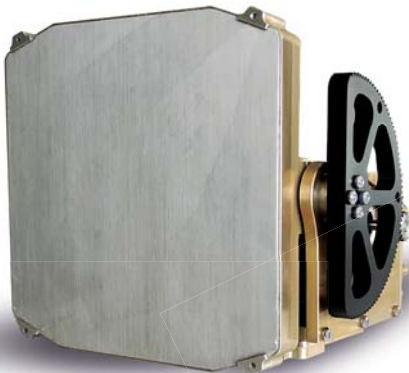
Features

- Data and GSM Communication
- Airborne and GSM
- LTE Band
- Fast Signal Acquisition
- GPS tracking

Two Axis Airborne Data Link Antenna System is used with the GSM base station on an airborne platform such as UAV, drone or balloon.

The system contains LTE band compact array antenna together with two axis pedestal to point the antenna. Pedestal steers the antenna to a specific direction to a location on the ground independent of the orientation of the airborne platform.

The system is compact and lightweight with a gain around 13dBic at LTE band. Thanks to its internal heaters it can operate at low temperatures down to -40 degrees. The antenna system is tested and certified according to MIL-STD environmental and electrical tests.



Antenna Specifications

Antenna	Array Antenna
Frequency	2.5 ~ 2.7 GHz
Polarisation	RHCP
Gain	13 dBic
HPBW	41°
VSWR	1.5:1

Positioner Specifications

Azimuth Range	360° continuous
Elevation Range	0 ~ +90°
Speed	90 °/sec
Acceleration	90 °/sec ²
Pointing Accuracy	< 0.4° RMS
External Interfaces	RS232, RS422
Pedestal Connection	SMA and circular connector for power and data
Software Update	RS232, RS422, Ethernet
Power	18-32 VDC
Tracking Source	GPS
Control Interface	Ethernet

Mechanical

Dimensions	177x134x156 mm
Weight	< 2.6 kg
Operating Temperature	-40° ~ +70°C

Environmental and Functional Tests

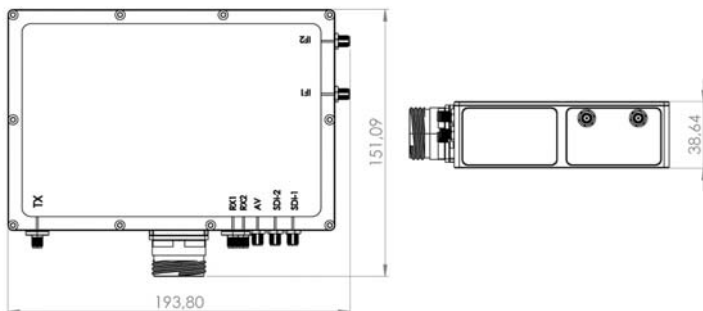
Low Temperature	MIL-STD-810G Method 502.5 Procedure-1
High Temperature	MIL-STD-810G Method 501.5 Procedure-1
Temperature Shock	MIL-STD-810G Method 503.5 Procedure-1
Low Pressure	MIL-STD-810G Method 500.5 Procedure-1
Acceleration	MIL-STD-810G Method 513.6 Procedure-2
Mechanic Shock	MIL-STD-810G Method 516.6 Procedure-1
Humidity	MIL-STD-810G Method 507.5
Vibration	MIL-STD-810G Method 514.5 Procedure-1
EMI / EMC	MIL-STD-461F and DO-160F

AIRBORNE AND GROUND DATA LINK ANTENNA SYSTEMS

Ground / Airborne Modem Transceiver

Features

- Full duplex data link for EO and IR applications
- UAV and manned platforms
- Minimized SWaP
- Complete end to end solution
- Upto 200 km range
- Dual H264/H265 engines
- QPSK/QAM modulation
- 8 MHz low channel bandwidth
- GPS and RSSI tracking antenna



Video and Audio

Video Inputs	1xSD analog video, 1xHD digital video
Digital video Formats	1080p30, 1080p25, 1080i60, 720p60
Audio Inputs	1xAudio input at mic level (for video streaming) 1xAudio input at line level (for radio communication)
Compression	H264 and H265
Video Bitrate	200 kbps ~ 10 Mbps (adjustable)
Connections	SMA connector for analog video and SDI inputs
KLV Metadata	Yes
External Encoder Input	Yes

Modem and Transceiver

Programmable Symbol Mapping	QPSK, 16-QAM, 64-QAM
Bitrate	1 Mbps ~ 31.6 Mbps (adjustable)
Bandwidth	2 MHz to 8 MHz
RF Frequency	C-Band Ku Band (ask for more details)
Diversity Switching	With two antennas

Power and Physical Specifications

Voltage	18 ~ 36 VDC
Power Consumption	AMT 85 watts GMT 80 watts
Dimensions	194x151x39
Weight	Airborne modem < 1200 g Ground modem < 1000 g
Operating Temperature	-70° ~ 85°C

Environmental and Functional Tests

Low Temperature	MIL-STD-810F Method 502.4 Procedure-1
High Temperature	MIL-STD-810F Method 501.4 Procedure-1
Pressure	MIL-STD-810F Method 500.5 Procedure-2
Temperature Shock	MIL-STD-810F Method 503.4 Procedure-1
Humidity	MIL-STD-810G Method 507.5
Vibration	MIL-STD-810F Method 514.5 Procedure-1
Rain	MIL-STD-810G Method 506.5 Procedure-1
ESD	AECTP 500 508/2

GNSS / FTS / TELEMETRY ANTENNAS

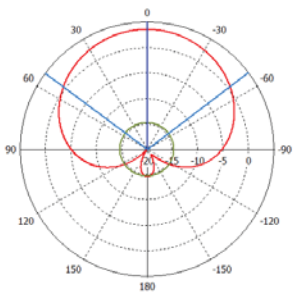


Passive L1 GPS Antenna

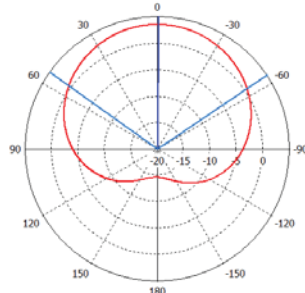
Model No: DGA015140

Features

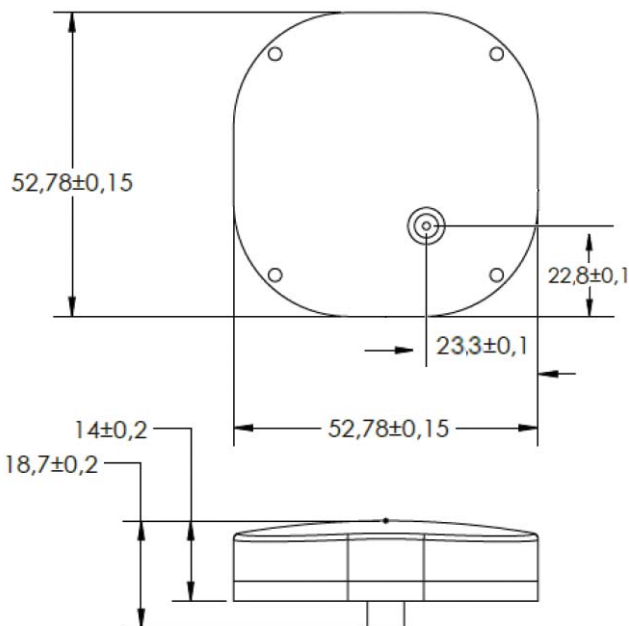
- Missile Applications
- Airborne Applications
- Data Link
- Durable to harsh environmental conditions
- Built to withstand extreme vibration and shock



Azimuth Pattern



Elevation Pattern



Electrical

Frequency	L1: 1575.42 ± 12 MHz
Radiation Pattern	Hemispherical
Gain	3.5 dBic
Polarisation	RHCP
Beamwidth	110 deg
VSWR	1.5:1
Impedance	50 ohm
Front to Back	>20 dB
Connector	SMA (Female)

Mechanical

Conformal Diameter	Spherical (R152.4 mm)
Dimensions	52,75x52.78x14mm
Weight	50 g
Operating Temperature	-40° to +85°C (-55° to 250°C optional)

Environmental and Functional Tests

Low Temperature	MIL-STD-810G Method 502.5 Procedure-1 and Procedure-2
High Temperature	MIL-STD-810G Method 501.5 Procedure-1 and Procedure-2
Temperature Shock	MIL-STD-810G Method 503.4 Procedure-2
Low Pressure	MIL-STD-810G Method 500.5 Procedure-1
Acceleration	MIL-STD-810G Method 513.6 Procedure-2
Mechanic Shock	MIL-STD-810G Method 516.6 Procedure-1
Humidity	MIL-STD-810G Method 507.5
Vibration	MIL-STD-810G Method 514.7 Procedure-1

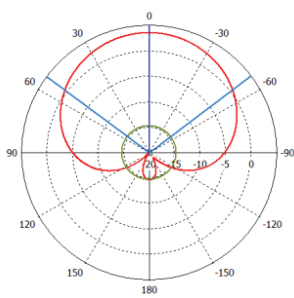
GNSS / FTS / TELEMETRY ANTENNAS

Passive L1/L2 GPS Antenna

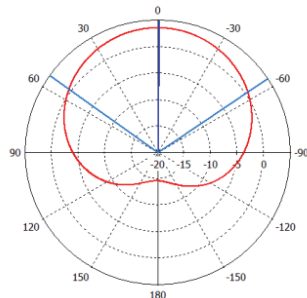
Model No: DGA015120

Features

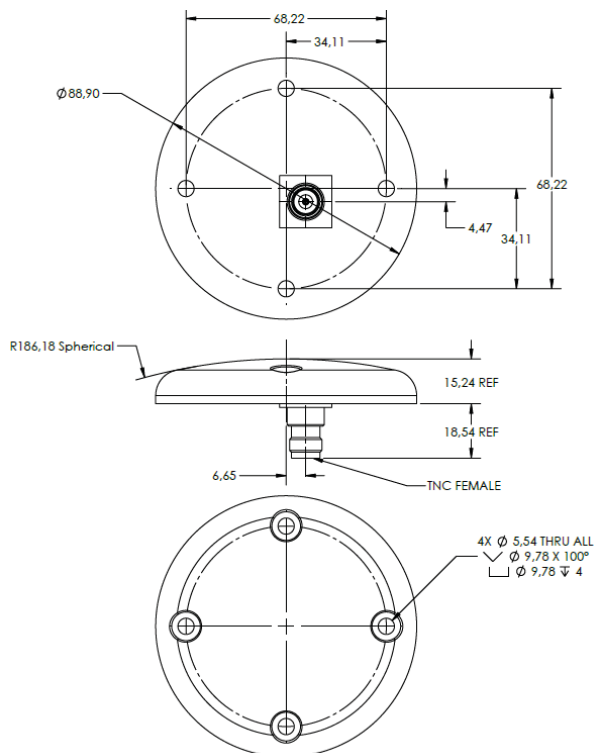
- Missile Applications
- Airborne Applications
- Durable to harsh environmental conditions
- Built to withstand extreme vibration and shock



Azimuth Pattern



Elevation Pattern



Electrical

Frequency	L1: 1575.42 ± 12 MHz L2: 1227 ± 12 MHz
Gain	L1: 4 dBic L2: 4 dBic
Polarisation	RHCP
Beamwidth	L1: 95 deg. L2: 102 deg.
VSWR	1.5:1
Impedance	50 ohm
Connector	SMA or TNC (Female)

Mechanical

Dimensions	Ø 3.5 in x 0.6 in
Weight	170 g
Operating Temperature	-40° to +85°C (-55° to 250°C optional)

Environmental and Functional Tests

Low Temperature	MIL-STD-810G Method 502.5 Procedure-1 and Procedure-2
High Temperature	MIL-STD-810G Method 501.5 Procedure-1 and Procedure-2
Temperature Shock	MIL-STD-810G Method 503.4 Procedure-2
Low Pressure	MIL-STD-810G Method 500.5 Procedure-1
Acceleration	MIL-STD-810G Method 513.6 Procedure-2
Mechanic Shock	MIL-STD-810G Method 516.6 Procedure-1
Humidity	MIL-STD-810G Method 507.5
Vibration	MIL-STD-810G Method 514.7 Procedure-1

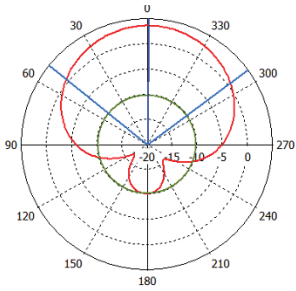
GNSS / FTS / TELEMETRY ANTENNAS

Active L1 GNSS Antenna

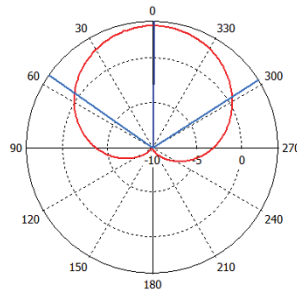
Model No: DGA015170

Features

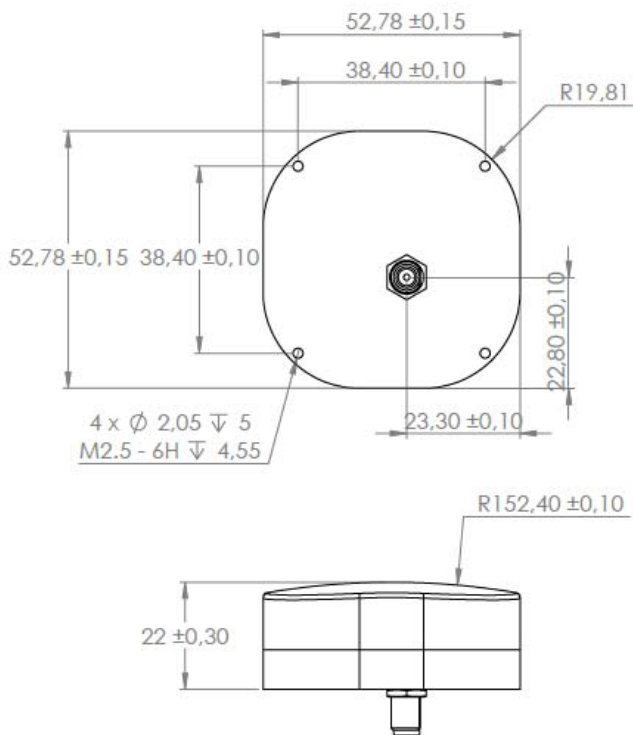
- Missile Applications
- Airborne Applications
- Data Link
- Durable to harsh environmental conditions
- Built to withstand extreme vibration and shock



Azimuth Pattern



Elevation Pattern



Electrical

Frequency	1560 - 1610 MHz
Radiation Pattern	Hemispherical
Gain	4 dBic
Polarisation	RHCP
Beamwidth	105 deg
VSWR	2:1
LNA Gain	30 dB
LNA Noise Figure	2 dB
Out of Band Rejection	<70 dBc @1500 MHz <70 dBc @1650 MHz
Impedance	50 ohm
DC Supply	3.3 V
Current Consumption	15 mA

Mechanical

Conformal Diameter	Spherical (R152.4 mm)
Dimensions	52,75x52.78x22mm
Weight	80 g
Operating Temperature	-55° to +150°C

Environmental and Functional Tests

Low Temperature	MIL-STD-810G Method 502.5 Procedure-1 and Procedure-2
High Temperature	MIL-STD-810G Method 501.5 Procedure-1 and Procedure-2
Temperature Shock	MIL-STD-810G Method 503.4 Procedure-2
Low Pressure	MIL-STD-810G Method 500.5 Procedure-1
Acceleration	MIL-STD-810G Method 513.6 Procedure-2
Mechanic Shock	MIL-STD-810G Method 516.6 Procedure-1
Humidity	MIL-STD-810G Method 507.5
Vibration	MIL-STD-810G Method 514.7 Procedure-1

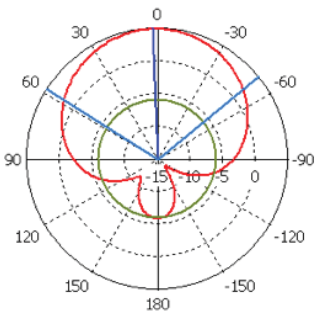
GNSS / FTS / TELEMETRY ANTENNAS

Active L1 GNSS Antenna

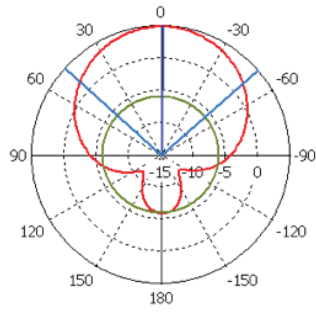
Model No: DGA015180

Features

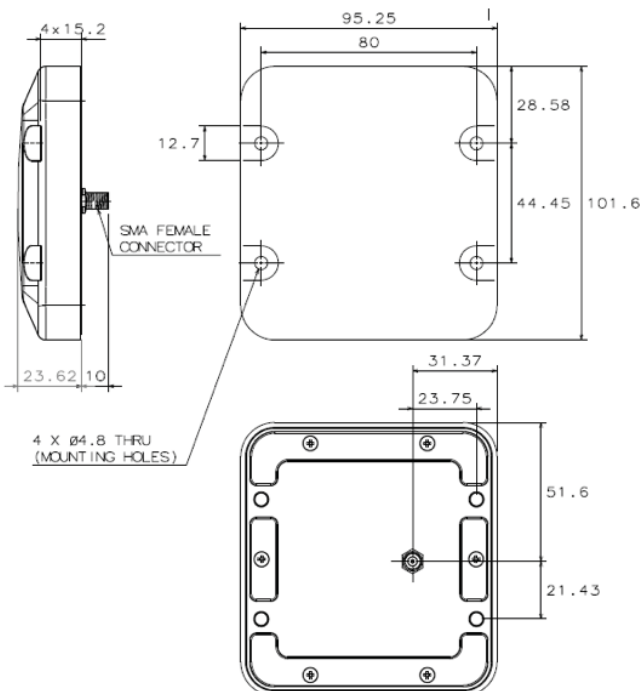
- Missile Applications
- Airborne Applications
- Data Link
- Durable to harsh environmental conditions
- Built to withstand extreme vibration and shock



Azimuth Pattern



Elevation Pattern



Electrical

Frequency	1560-1610 MHz
Radiation Pattern	Hemispherical
Gain	4 dBic
Polarisation	RHCP
Axial Ratio	≤ 2.0 dB (@Zenith)
Beamwidth	108 deg.
VSWR	2:1
LNA Gain	30 dB
LNA Noise Figure	2 dB
Out of Band Rejection	< 70 dBc @1500 MHz < 70 dBc @1650 MHz
Impedance	50 ohm
DC Supply	Regulated 3.3-15 VDC Typical
Current Consumption	15 mA Max.
Connector	SMA Female

Mechanical

Mass	230 g
Temperature	-55° to +85°C

Environmental and Functional Tests

Low Temperature	MIL-STD-810G Method 502.5 Procedure-1 and Procedure-2
High Temperature	MIL-STD-810G Method 501.5 Procedure-1 and Procedure-2
Temperature Shock	MIL-STD-810G Method 503.4 Procedure-2
Low Pressure	MIL-STD-810G Method 500.5 Procedure-1
Acceleration	MIL-STD-810G Method 513.6 Procedure-2
Mechanic Shock	MIL-STD-810G Method 516.6 Procedure-1
Humidity	MIL-STD-810G Method 507.5
Vibration	MIL-STD-810G Method 514.7 Procedure-1

GNSS / FTS / TELEMETRY ANTENNAS

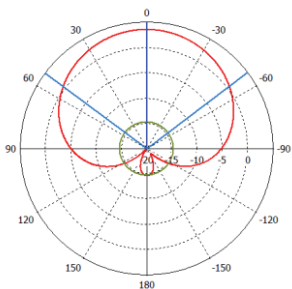


Active L1/L2 GPS Antenna

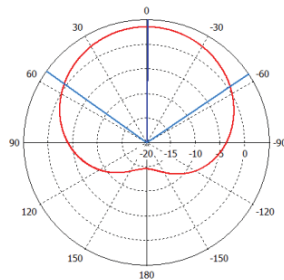
Model No: DGA015100

Features

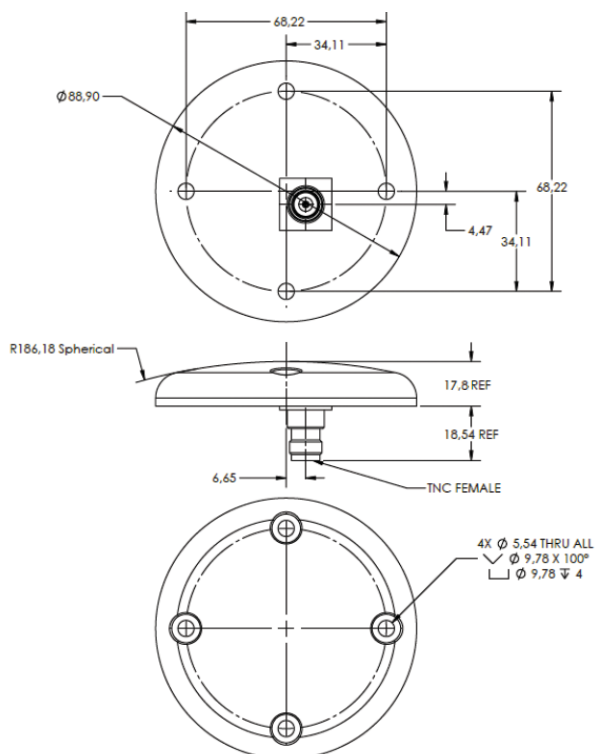
- Missile Applications
- Airborne Applications
- L1 and L2 band LNA
- Excellent out of band rejection
- Durable to harsh environmental conditions
- Built to withstand extreme vibration and shock



Azimuth Pattern



Elevation Pattern



Electrical

Frequency	L1: 1575.42 ± 10 MHz L2: 1227 ± 10 MHz
Gain	L1: 4 dBic L2: 4 dBic
Polarisation	RHCP
Beamwidth	L1: 95 deg. L2: 102 deg.
Gain (Preamplifier)	13 ± 3 dB
Axial Ratio	≤ 2.0 dB (@Zenith)
VSWR	2:1
Impedance	50 ohm
Supply Voltage	13 ± 3 dB
Power Handling	4 to 24 VDC @ 65mA Max
Lightning Protection	1 Watt
Connector	SMA or TNC (Female)

Mechanical

Dimensions	$\phi 3.5$ in x 0.7 in
Weight	200 g (7 oz)
Operating Temperature	-40° to $+85^\circ$ C (-55° to 250° C optionally)

Environmental and Functional Tests

Low Temperature	MIL-STD-810G Method 502.5 Procedure-1 and Procedure-2
High Temperature	MIL-STD-810G Method 501.5 Procedure-1 and Procedure-2
Temperature Shock	MIL-STD-810G Method 503.4 Procedure-2
Low Pressure	MIL-STD-810G Method 500.5 Procedure-1
Acceleration	MIL-STD-810G Method 513.6 Procedure-2
Mechanic Shock	MIL-STD-810G Method 516.6 Procedure-1
Humidity	MIL-STD-810G Method 507.5
Vibration	MIL-STD-810G Method 514.7 Procedure-1

GNSS / FTS / TELEMETRY ANTENNAS

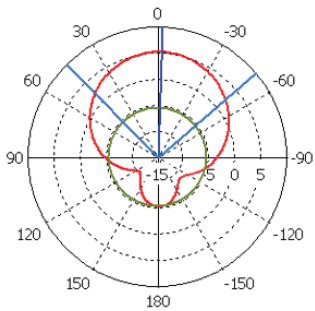


Active L1/L2 GNSS Antenna

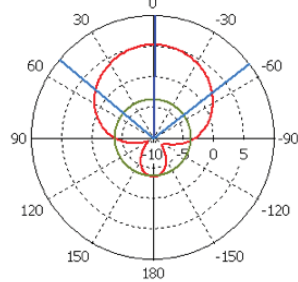
Model No: DGA015190

Features

- Missile Applications
- Airborne Applications
- Data Link
- Durable to harsh environmental conditions
- Built to withstand extreme vibration and shock



L1 Band



L2 Band



Electrical

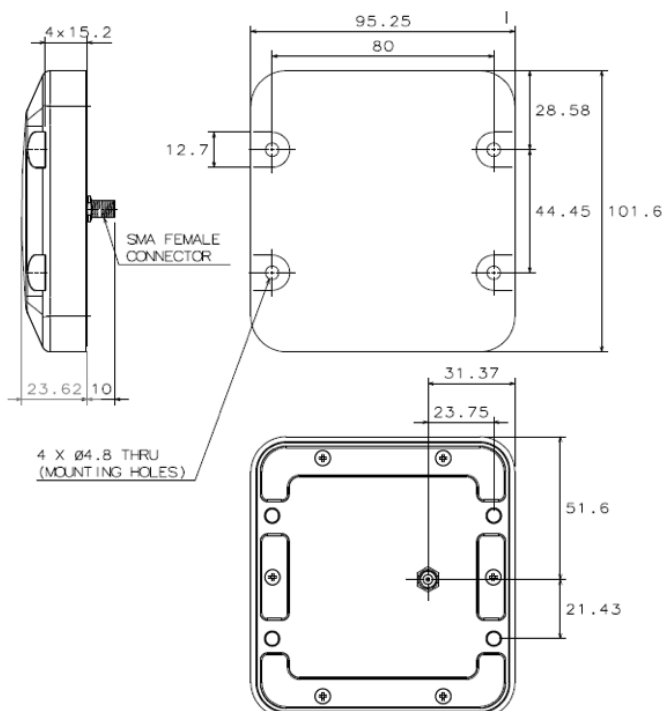
Frequency	L1: 1560-1610 MHz L2: 1197-1240 MHz
Radiation Pattern	Hemispherical
Gain	4 dBic
Polarisation	RHCP
Axial Ratio	≤ 2.0 dB (@Zenith)
Beamwidth	L1: 92 deg L2: 102 deg.
VSWR	2:1
LNA Gain	40 dB
LNA Noise Figure	2 dB
Isolation Between Bands	>50 dB
Impedance	50 ohm
DC Supply	Regulated 3.3-15 VDC Typical
Current Consumption	50 mA Max.
Connector	SMA Female

Mechanical

Mass	230 g
Temperature	-55° to +85°C

Environmental and Functional Tests

Low Temperature	MIL-STD-810G Method 502.5 Procedure-1 and Procedure-2
High Temperature	MIL-STD-810G Method 501.5 Procedure-1 and Procedure-2
Temperature Shock	MIL-STD-810G Method 503.4 Procedure-2
Low Pressure	MIL-STD-810G Method 500.5 Procedure-1
Acceleration	MIL-STD-810G Method 513.6 Procedure-2
Mechanic Shock	MIL-STD-810G Method 516.6 Procedure-1
Humidity	MIL-STD-810G Method 507.5
Vibration	MIL-STD-810G Method 514.7 Procedure-1



GNSS / FTS / TELEMETRY ANTENNAS

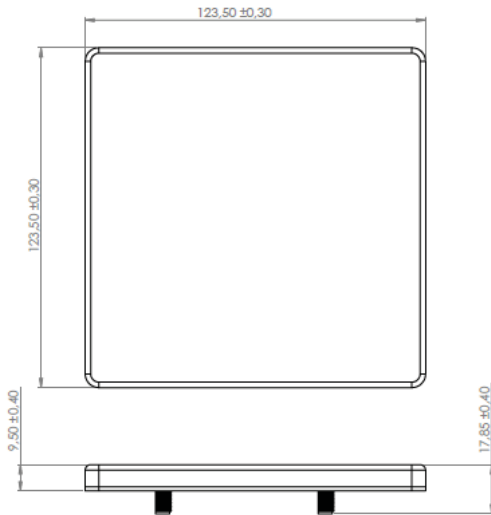


4 Array L1 Antijam Antenna

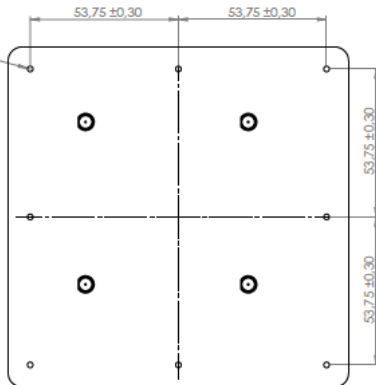
Model No:DGA015100

Features

- Missile Applications
- Airborne Applications
- Durable to harsh environmental conditions
- Built to withstand extreme vibration and shock



8 x \varnothing 2.05 Ψ 3.50
M2.5 - 6H Ψ 3.50



Electrical

Frequency	L1: 1575.42 \pm 12 MHz
Gain	L1: 3 dBic (each unit antenna)
Polarisation	RHCP
Beamwidth	L1: 123° \leq 2.0 dB (@Zenith)
VSWR	2:1
Impedance	50 ohm
Connector	SMA or TNC (Female)

Mechanical

Dimensions	123.5 x 123.5 x 9.5 mm
Weight	260 g
Operating Temperature	-40° to +85°C (-55° to 250°C optional)

Environmental and Functional Tests

Low Temperature	MIL-STD-810G Method 502.5 Procedure-1 and Procedure-2
High Temperature	MIL-STD-810G Method 501.5 Procedure-1 and Procedure-2
Temperature Shock	MIL-STD-810G Method 503.4 Procedure-2
Low Pressure	MIL-STD-810G Method 500.5 Procedure-1
Acceleration	MIL-STD-810G Method 513.6 Procedure-2
Mechanic Shock	MIL-STD-810G Method 516.6 Procedure-1
Humidity	MIL-STD-810G Method 507.5
Vibration	MIL-STD-810G Method 514.7 Procedure-1

GNSS / FTS / TELEMETRY ANTENNAS

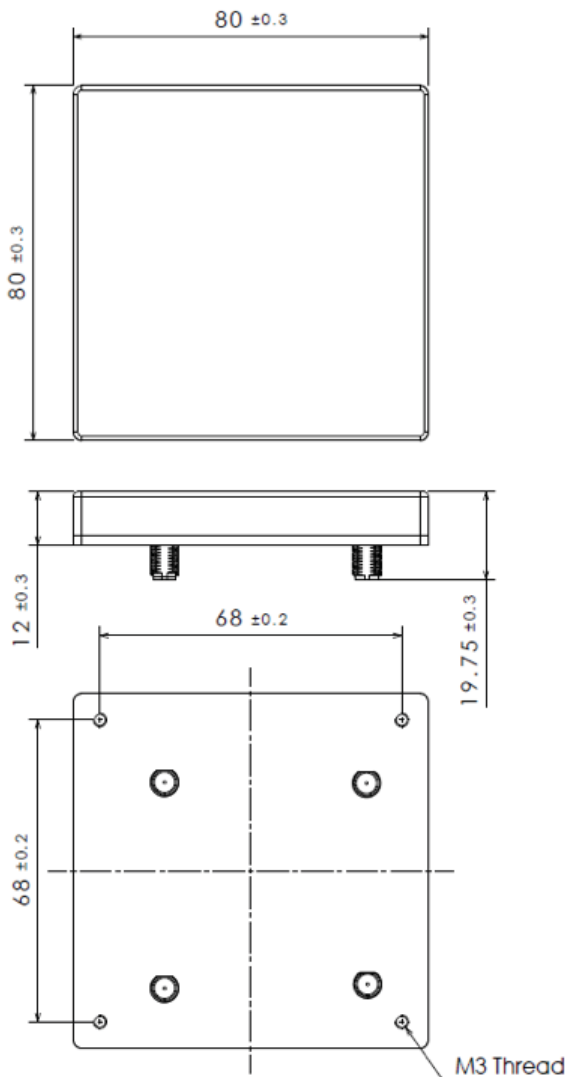


4 Array L1 GNSS Antijam Antenna

Model No: DGAA015110

Features

- Missile Applications
- Airborne Applications
- Durable to harsh environmental conditions
- Built to withstand extreme vibration and shock



Electrical

Frequency	1560-1610 MHz
Gain	L1: 2 dBic (each unit antenna)
Polarisation	RHCP
Beamwidth	L1: 155° ≤3.0 dB (@Zenith)
VSWR	2:1
Impedance	50 ohm
Connector	SMA or TNC (Female)

Mechanical

Dimensions	80x80x12 mm
Weight	200 g
Operating Temperature	-40° to +85°C (-55° to 250°C optional)

Environmental and Functional Tests

Low Temperature	MIL-STD-810G Method 502.5 Procedure-1 and Procedure-2
High Temperature	MIL-STD-810G Method 501.5 Procedure-1 and Procedure-2
Temperature Shock	MIL-STD-810G Method 503.4 Procedure-2
Low Pressure	MIL-STD-810G Method 500.5 Procedure-1
Acceleration	MIL-STD-810G Method 513.6 Procedure-2
Mechanic Shock	MIL-STD-810G Method 516.6 Procedure-1
Humidity	MIL-STD-810G Method 507.5
Vibration	MIL-STD-810G Method 514.7 Procedure-1

GNSS / FTS / TELEMETRY ANTENNAS

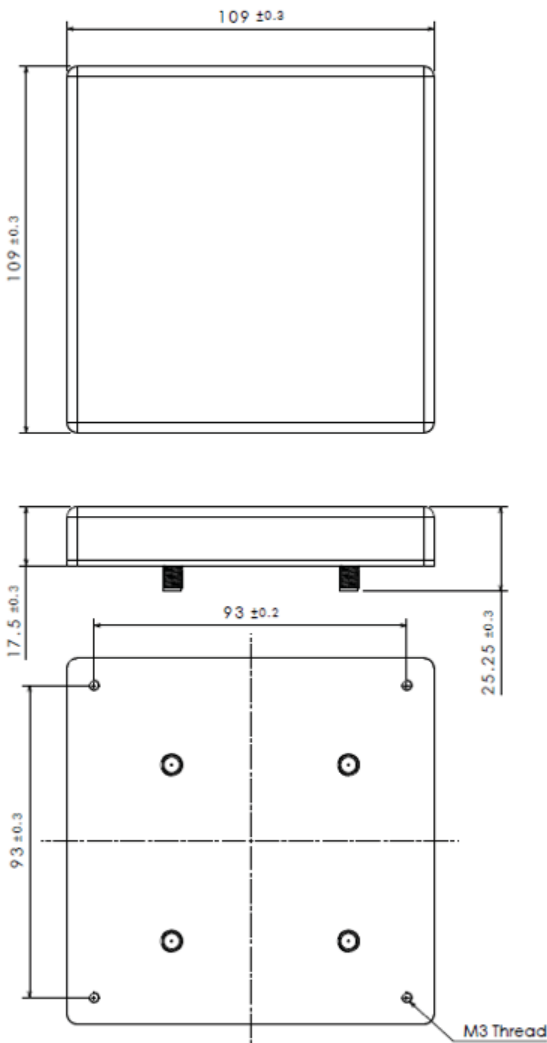


4 Array L1/L2 GNSS Antijam Antenna

Model No: DGAA012015100

Features

- Missile Applications
- Airborne Applications
- Durable to harsh environmental conditions
- Built to withstand extreme vibration and shock



Electrical

Frequency	L1: 1560-1610 MHz L2: 1202-1252 MHz
Gain	2 dBic (each unit antenna)
Polarisation	RHCP
Beamwidth	155°
VSWR	≤ 3.0 dB (@Zenith)
Impedance	2:1
Connector	50 ohm SMA or TNC (Female)

Mechanical

Dimensions	109x109x17.5 mm
Weight	250 g
Operating Temperature	-40° to +85°C (-55° to 250°C optional)

Environmental and Functional Tests

Low Temperature	MIL-STD-810G Method 502.5 Procedure-1 and Procedure-2
High Temperature	MIL-STD-810G Method 501.5 Procedure-1 and Procedure-2
Temperature Shock	MIL-STD-810G Method 503.4 Procedure-2
Low Pressure	MIL-STD-810G Method 500.5 Procedure-1
Acceleration	MIL-STD-810G Method 513.6 Procedure-2
Mechanic Shock	MIL-STD-810G Method 516.6 Procedure-1
Humidity	MIL-STD-810G Method 507.5
Vibration	MIL-STD-810G Method 514.7 Procedure-1

GNSS / FTS / TELEMETRY ANTENNAS

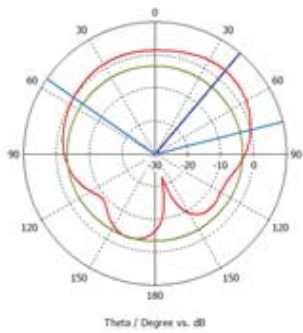


UHF Flight Termination Antenna

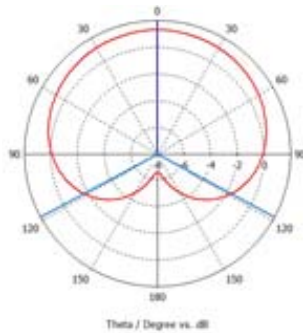
Model No: DFA004100

Features

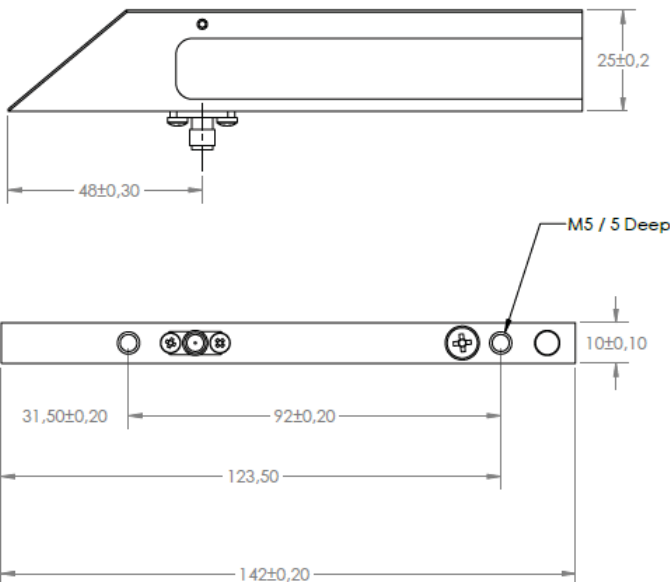
- Airborne Applications
- For Aircrafts, Helicopters, UAV's
- Data Link, Transponder
- Rugged, Airborne Design
- Ultra Lightweight
- Built to withstand extreme vibration and shock



Azimuth Pattern



Elevation Pattern



Electrical

Frequency Bandwidth	350-475 Mhz (Tunable) ± 1 MHz @ VSWR 1.5:1 ± 2 MHz @ VSWR 2:1
Gain	nom 0 dBi
Polarisation	Linear
Coverage	Omni-Directional
Input Impedance	50 ohm
RF Connector	SMA-Female
Power Rating	20 W cw, max.
Connector	SMA (Female)

Mechanical

Dimensions	142x10x25 mm
Weight	70 g
Operating Temperature	-55° to 250°C

Environmental and Functional Tests

Low Temperature	MIL-STD-810F Method 502.4 Procedure-1
High Temperature	MIL-STD-810F Method 501.4 Procedure-1
Temperature Shock	MIL-STD-810F Method 503.4 Procedure-1
Low Pressure	MIL-STD-810F Method 500.4 Procedure-1
Acceleration	MIL-STD-810F Method 513.5 Procedure-2
Mechanic Shock	MIL-STD-810F Method 516.5 Procedure-1
Humidity	MIL-STD-810F Method 507.4
Vibration	MIL-STD-810F Method 514.5 Procedure-1

GNSS / FTS / TELEMETRY ANTENNAS

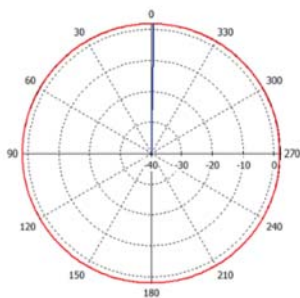


Low Profile UHF Aerodynamic Antenna

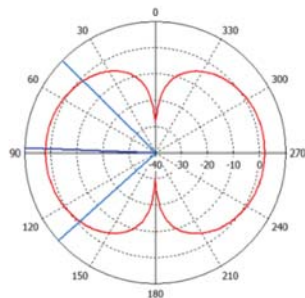
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Features

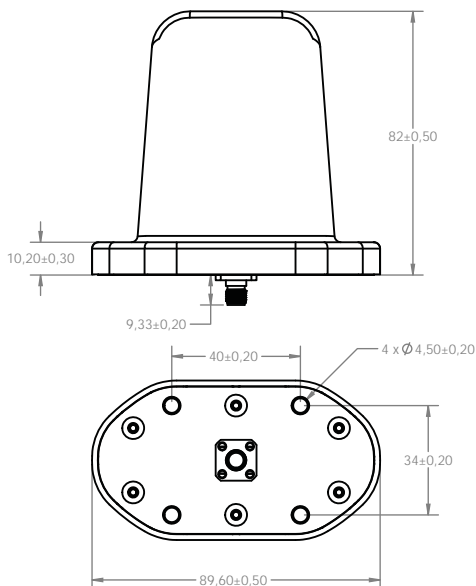
- Airborne and UAV Applications
- Telemetry, Data Link, Transponder
- Omni Directional Pattern
- Ultra Lightweight
- Durable to harsh environmental conditions



Azimuth Pattern



Elevation Pattern



Electrical

Frequency	902-928 Mhz
Gain	2 dBi
Polarisation	Linear (Vertical)
Beamwidth	360° (Az) x 86° (EI)
Cross Polar	>30 dB
VSWR	1.5:1
Power Rating	20 W
Connector	SMA (Female)

Mechanical

Dimensions	90x50x82 mm
Weight	200 g
Operating Temperature	-40° to +85°C (-55° to 250°C optional)

Environmental and Functional Tests

Low Temperature	MIL-STD-810F Method 502.4 Procedure-1
High Temperature	MIL-STD-810F Method 501.4 Procedure-1
Temperature Shock	MIL-STD-810F Method 503.4 Procedure-1
Low Pressure	MIL-STD-810F Method 500.4 Procedure-1
Acceleration	MIL-STD-810F Method 513.5 Procedure-2
Mechanic Shock	MIL-STD-810F Method 516.5 Procedure-1
Humidity	MIL-STD-810F Method 507.4
Vibration	MIL-STD-810F Method 514.5 Procedure-1

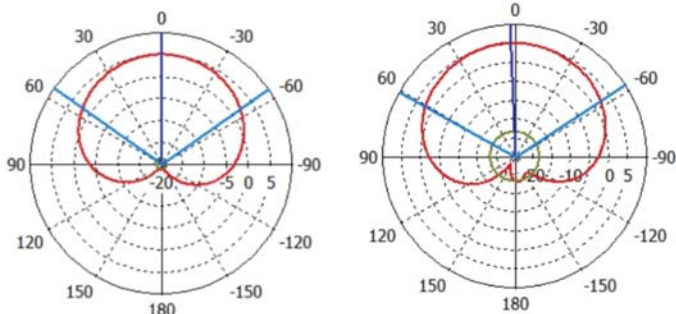
GNSS / FTS / TELEMETRY ANTENNAS

L Band Hemi Omni Antenna

Model No:DTA014100

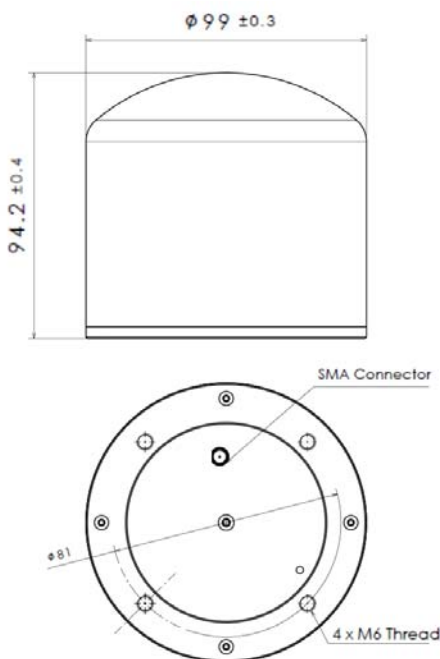
Features

- Airborne, UAV and Missile Applications
- Data Link, Telemetry Antenna
- Right Hand Circular Polarised Antenna
- Durable to harsh environmental conditions
- Built to withstand extreme vibration and shock



Azimuth Pattern

Elevation Pattern



Electrical

Frequency	1345-1405 MHz
Radiation Pattern	Hemi Omni
Gain	5 dBic Nom.
Polarisation	RHCP
Beamwidth	140° x 140° Typ. @ 0 dBIC
VSWR	1.5:1
Power Rating	100 W
Impedance	50 ohm
Front to Back	> 10 dB
Connector	SMA (Female)

Mechanical

Dimensions	Ø99 x 94.2 mm
Weight	250 g
Operating Temperature	-40° to +85°C

Environmental and Functional Tests

Low Temperature	MIL-STD-810F Method 502.4 Procedure-1
High Temperature	MIL-STD-810F Method 501.4 Procedure-1
Temperature Shock	MIL-STD-810F Method 503.4 Procedure-1
Low Pressure	MIL-STD-810F Method 500.4 Procedure-1
Acceleration	MIL-STD-810F Method 513.5 Procedure-2
Mechanic Shock	MIL-STD-810F Method 516.5 Procedure-1
Humidity	MIL-STD-810F Method 507.4
Vibration	MIL-STD-810F Method 514.5 Procedure-1

GNSS / FTS / TELEMETRY ANTENNAS

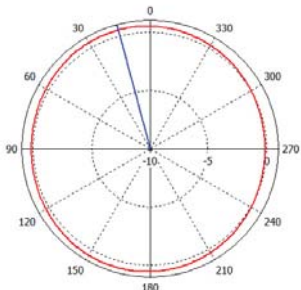


L Band Blade Antenna

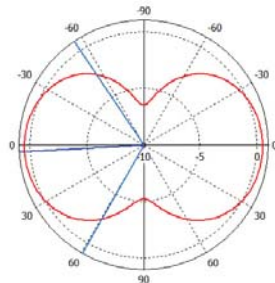
Model No:DTA013110

Features

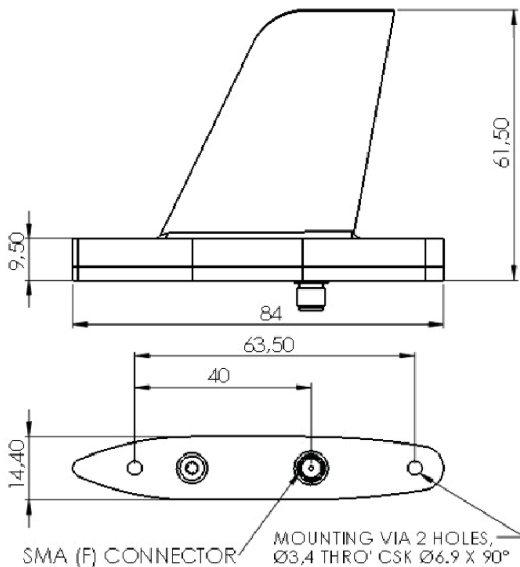
- Airborne Applications
- Telemetry, Data Link, Transponder
- Rugged
- Ultra Lightweight
- Built to withstand extreme vibration and shock



Azimuth Pattern
(measured on 200 mm ground plane)



Elevation Pattern
(measured on 200 mm ground plane)



Electrical

Frequency	1.35-1.4 GHz
Gain	2 dBi
Polarisation	Linear (Vertical)
Beamwidth	360° (Az) x 116° (EI)
VSWR	2:1
Power Rating	20 W
Connector	SMA (Female)

Mechanical

Dimensions	84x14.4x61.5 mm
Weight	40 g
Operating Temperature	-40° to +85°C (-55° to 250°C optional)

Environmental and Functional Tests

Low Temperature	MIL-STD-810F Method 502.4 Procedure-1
High Temperature	MIL-STD-810F Method 501.4 Procedure-1
Temperature Shock	MIL-STD-810F Method 503.4 Procedure-1
Low Pressure	MIL-STD-810F Method 500.4 Procedure-1
Acceleration	MIL-STD-810F Method 513.5 Procedure-2
Mechanic Shock	MIL-STD-810F Method 516.5 Procedure-1
Humidity	MIL-STD-810F Method 507.4
Vibration	MIL-STD-810F Method 514.5 Procedure-1



Environmental and Functional Tests are performed by TÜBİTAK SAGE

GNSS / FTS / TELEMETRY ANTENNAS

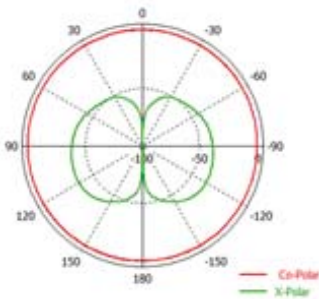


S Band Omni Blade Antenna

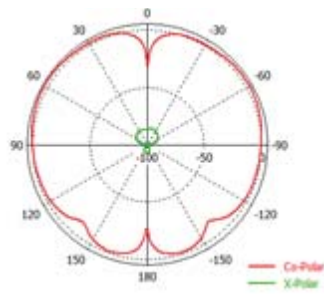
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Features

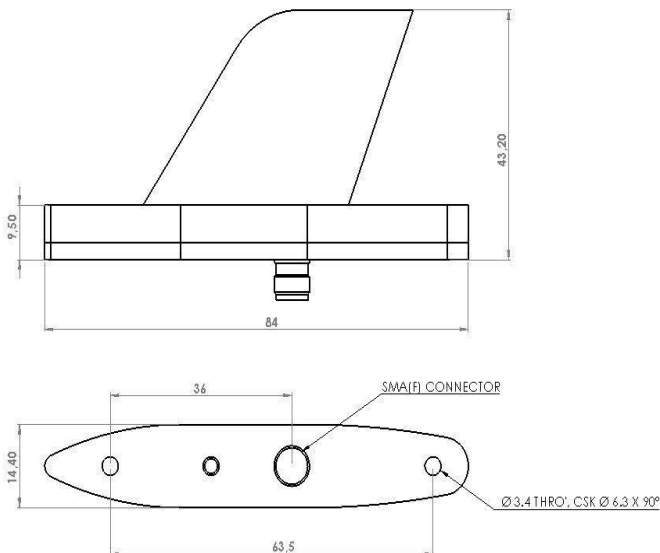
- Airborne Applications
- Telemetry, Data Link, Transponder
- Rugged
- Ultra Lightweight
- Built to withstand extreme vibration and shock



Azimuth Pattern
(measured on 240 mm ground plane)



Elevation Pattern
(measured on 240 mm ground plane)



Electrical

Frequency	2.2-2.4 GHz (The frequency can be revised)
Gain	3.22 dBi
Polarisation	Linear (Vertical)
Beamwidth	360° (Az) x 73.1° (El)
Cross Polar	>36 dB
VSWR	1.7:1
Power Rating	30 W
Connector	SMA (Female)

Mechanical

Dimensions	84x14.4x43.2 mm
Weight	25 g
Operating Temperature	-40° to + 71°C (-55° to 250°C optional)

Environmental and Functional Tests

Low Temperature	MIL-STD-810F Method 502.4 Procedure-1
High Temperature	MIL-STD-810F Method 501.4 Procedure-1
Temperature Shock	MIL-STD-810F Method 503.4 Procedure-1
Low Pressure	MIL-STD-810F Method 500.4 Procedure-1
Acceleration	MIL-STD-810F Method 513.5 Procedure-2
Mechanic Shock	MIL-STD-810F Method 516.5 Procedure-1
Humidity	MIL-STD-810F Method 507.4
Vibration	MIL-STD-810F Method 514.5 Procedure-1



Environmental and Functional Tests are performed by TÜBİTAK SAGE

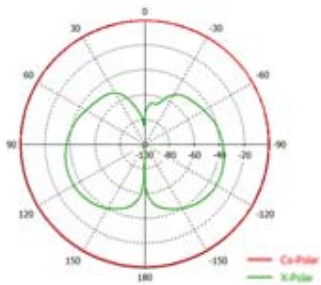
GNSS / FTS / TELEMETRY ANTENNAS

S Band Omni Rounded Blade Antenna

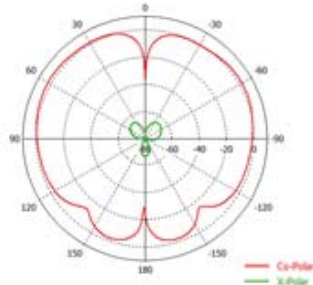
Model No:DTA023120

Features

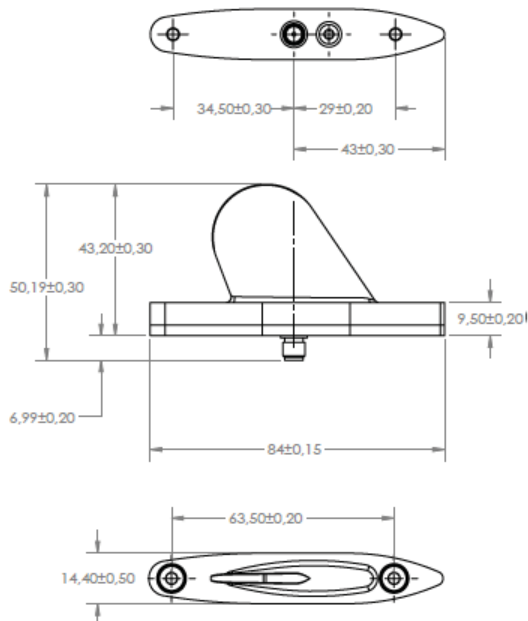
- Airborne Applications
- Telemetry, Data Link, Transponder
- Rugged
- Ultra Lightweight
- Built to withstand extreme vibration and shock



Azimuth Pattern
(measured on 240 mm ground plane)



Elevation Pattern
(measured on 240 mm ground plane)



Electrical

Frequency	2.2-2.4 GHz (The frequency can be revised)
Gain	3 dBi
Polarisation	Linear (Vertical)
Beamwidth	360° (Az) x 74.5° (El)
Cross Polar	>36 dB
VSWR	1.7:1
Power Rating	30 W
Connector	SMA (Female)

Mechanical

Dimensions	84x14.4x43.2 mm
Weight	25 g
Operating Temperature	-40° to + 71°C (-55° to 250°C optional)

Environmental and Functional Tests

Low Temperature	MIL-STD-810F Method 502.4 Procedure-1
High Temperature	MIL-STD-810F Method 501.4 Procedure-1
Temperature Shock	MIL-STD-810F Method 503.4 Procedure-1
Low Pressure	MIL-STD-810F Method 500.4 Procedure-1
Acceleration	MIL-STD-810F Method 513.5 Procedure-2
Mechanic Shock	MIL-STD-810F Method 516.5 Procedure-1
Humidity	MIL-STD-810F Method 507.4
Vibration	MIL-STD-810F Method 514.5 Procedure-1

GNSS / FTS / TELEMETRY ANTENNAS

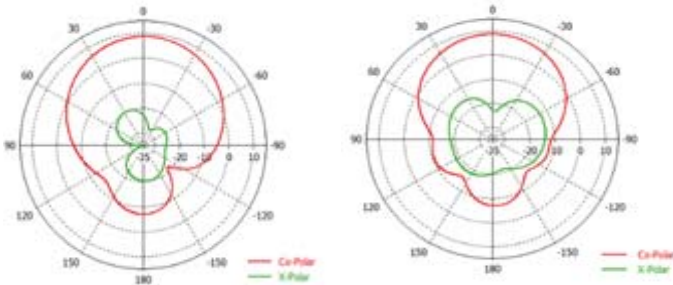


S Band Low Profile Patch Antenna

Model No:DTA023200

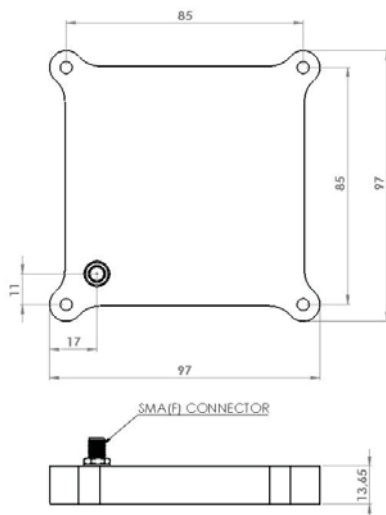
Features

- Airborne Applications
- Telemetry, Data Link, Transponder
- Rugged
- Ultra Lightweight
- Built to withstand extreme vibration and shock



Azimuth Pattern

Elevation Pattern



Electrical

Frequency	2.2-2.4 GHz
Gain	8.6 dBi
Polarisation	Linear (Vertical)
Beamwidth	74° (Az) x 67° (El)
Cross Polar	>22 dB
VSWR	1.5:1
Power Rating	20 W
Front to Back	>20 dB
Connector	SMA (Female)

Mechanical

Dimensions	97x97x13.65 mm
Weight	143 g
Operating Temperature	-40° to +85°C

Environmental and Functional Tests

Low Temperature	MIL-STD-810F Method 502.4 Procedure-1
High Temperature	MIL-STD-810F Method 501.4 Procedure-1
Temperature Shock	MIL-STD-810F Method 503.4 Procedure-1
Low Pressure	MIL-STD-810F Method 500.4 Procedure-1
Acceleration	MIL-STD-810F Method 513.5 Procedure-2
Mechanic Shock	MIL-STD-810F Method 516.5 Procedure-1
Humidity	MIL-STD-810F Method 507.4
Vibration	MIL-STD-810F Method 514.5 Procedure-1



Environmental and Functional Tests are performed by TUBITAK SAGE

GNSS / FTS / TELEMETRY ANTENNAS

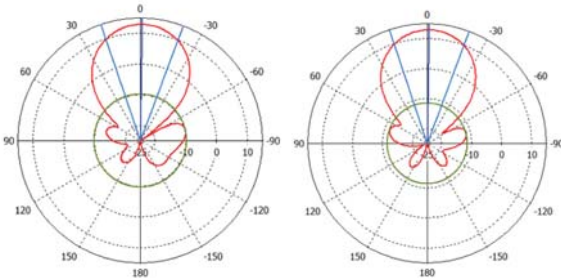


S Band Low Profile Patch Array Antenna

Model No:DTA031100

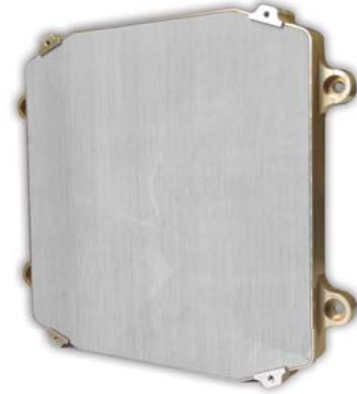
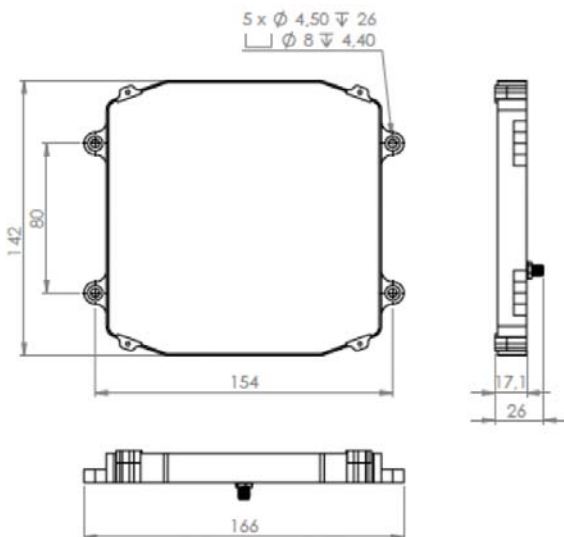
Features

- Airborne Applications
- GSM, Telemetry, Data Link, Transponder
- Circular Polarized Antenna
- Ultra Lightweight
- Built to withstand extreme vibration and shock



Azimuth Pattern

Elevation Pattern



Electrical

Frequency	3-3.2 GHz
Gain	Min. 10 dBic
Polarisation	RHCP
Beamwidth	20° (Az) x 20° (El)
VSWR	1.5:1
Power Rating	10 W
Front to Back	>20 dB
Connector	SMA (Female)

Mechanical

Dimensions	166x142x17.1 mm
Weight	<400 g
Operating Temperature	-40° to +85°C

Environmental and Functional Tests

Low Temperature	MIL-STD-810F Method 502.4 Procedure-1
High Temperature	MIL-STD-810F Method 501.4 Procedure-1
Temperature Shock	MIL-STD-810F Method 503.4 Procedure-1
Low Pressure	MIL-STD-810F Method 500.4 Procedure-1
Acceleration	MIL-STD-810F Method 513.5 Procedure-2
Mechanic Shock	MIL-STD-810F Method 516.5 Procedure-1
Humidity	MIL-STD-810F Method 507.4
Vibration	MIL-STD-810F Method 514.5 Procedure-1



Environmental and Functional Tests are performed by TÜBİTAK SAGE

GNSS / FTS / TELEMETRY ANTENNAS

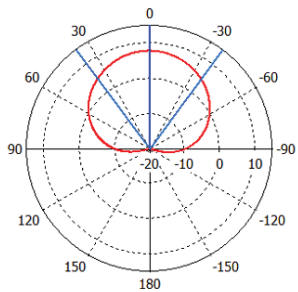


LTE Band Low Profile Patch Antenna

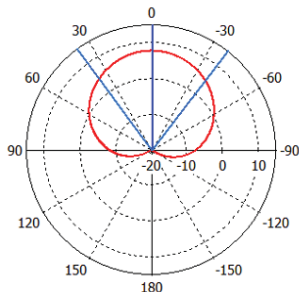
Model No:DTA026100

Features

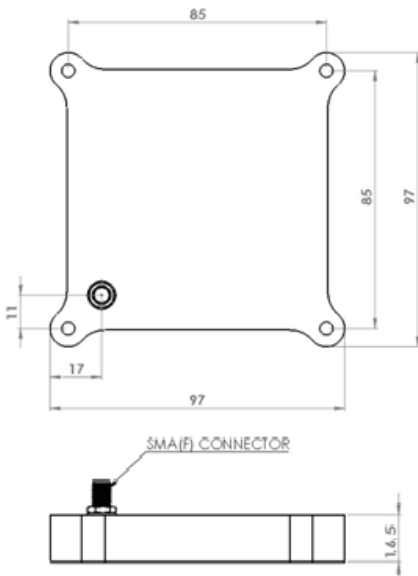
- Airborne Applications
- GSM, Telemetry, Data Link, Transponder
- Circular Polarized Antenna
- Rugged
- Ultra Lightweight
- Built to withstand extreme vibration and shock



Azimuth Pattern



Elevation Pattern



Electrical

Frequency	2.5-2.7 GHz
Gain	7.6 dBic
Polarisation	RHCP or LHCP
Beamwidth	74° (Az) x 72° (El)
Cross Polar	>22 dB
VSWR	1.5:1
Front to Back	>25 dB
Connector	SMA or TNC (Female)

Mechanical

Dimensions	97x97x16.5 mm
Weight	155 g
Operating Temperature	-40° to +85°C

Environmental and Functional Tests

Low Temperature	MIL-STD-810F Method 502.4 Procedure-1
High Temperature	MIL-STD-810F Method 501.4 Procedure-1
Temperature Shock	MIL-STD-810F Method 503.4 Procedure-1
Low Pressure	MIL-STD-810F Method 500.4 Procedure-1
Acceleration	MIL-STD-810F Method 513.5 Procedure-2
Mechanic Shock	MIL-STD-810F Method 516.5 Procedure-1
Humidity	MIL-STD-810F Method 507.4
Vibration	MIL-STD-810F Method 514.5 Procedure-1

GNSS / FTS / TELEMETRY ANTENNAS

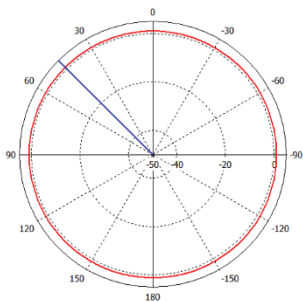


C Band Omni Antenna

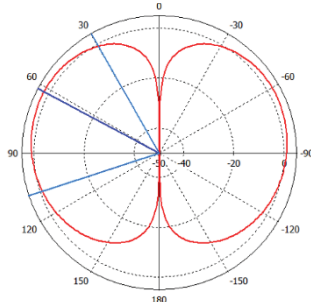
Model No:DTA050100

Features

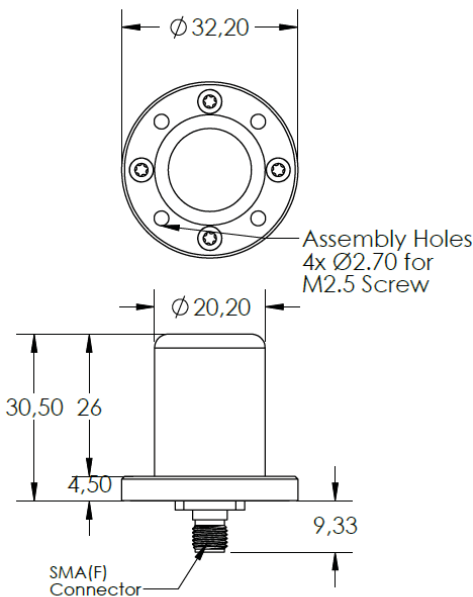
- Airborne and UAV Applications
- Telemetry, Data Link, Transponder
- Omni Directional Pattern
- Ultra Lightweight
- Durable to harsh environmental conditions



Azimuth Pattern



Elevation Pattern



Electrical

Frequency	4–6 Ghz
Gain	2 dBi
Polarisation	Linear (Vertical)
Beamwidth	360° (Az) x 62° (El)
Cross Polar	>30 dB
VSWR	1.5:1
Power Rating	20 W
Connector	SMA Female

Mechanical

Dimensions	Ø32.2x30.5 mm
Weight	42 g
Operating Temperature	-40° to +85°C (-55° to 250°C optional)

Environmental and Functional Tests

Low Temperature	MIL-STD-810F Method 502.4 Procedure-1
High Temperature	MIL-STD-810F Method 501.4 Procedure-1
Temperature Shock	MIL-STD-810F Method 503.4 Procedure-1
Low Pressure	MIL-STD-810F Method 500.4 Procedure-1
Acceleration	MIL-STD-810F Method 513.5 Procedure-2
Mechanic Shock	MIL-STD-810F Method 516.5 Procedure-1
Humidity	MIL-STD-810F Method 507.4
Vibration	MIL-STD-810F Method 514.5 Procedure-1

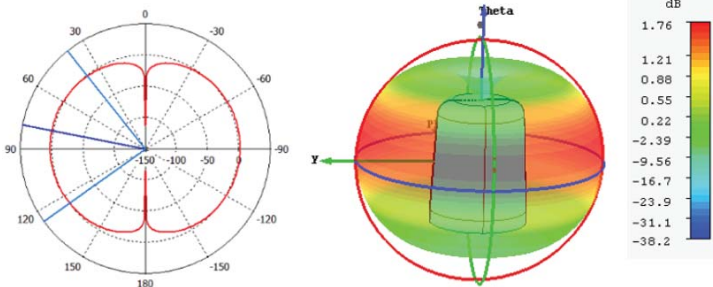
GNSS / FTS / TELEMETRY ANTENNAS

C Band Omni Button Antenna

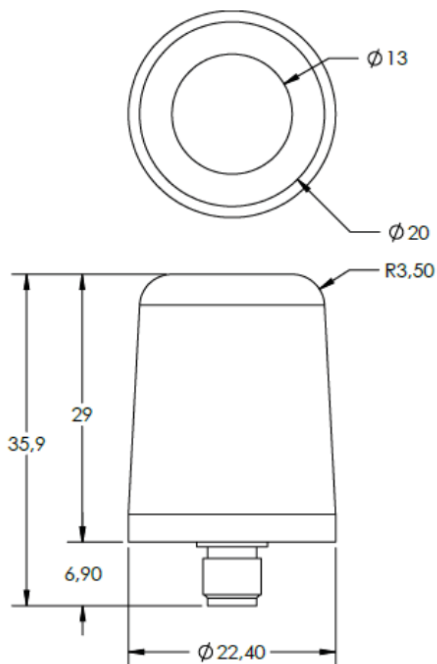
Model No:DTA050120

Features

- Airborne, UAV and Missile Applications
- Omni Directional Data Link Antenna
- Linear Polarised Antenna



Azimuth Pattern



Electrical

Frequency	4-6 Ghz
Gain	≥ 1.7 dBi
Polarisation	Linear
Beamwidth	360° (Az) x 77° (EI)
Impedance	50 ohm
VSWR	1.7:1
Connector	SMA Female

Mechanical

Dimensions	Ø22.4x29 mm
Weight	30 g
Operating Temperature	-40° to +85°C (-55° to 250°C optional)

Environmental and Functional Tests

Low Temperature	MIL-STD-810F Method 502.4 Procedure-1
High Temperature	MIL-STD-810F Method 501.4 Procedure-1
Temperature Shock	MIL-STD-810F Method 503.4 Procedure-1
Low Pressure	MIL-STD-810F Method 500.4 Procedure-1
Acceleration	MIL-STD-810F Method 513.5 Procedure-2
Mechanic Shock	MIL-STD-810F Method 516.5 Procedure-1
Humidity	MIL-STD-810F Method 507.4
Vibration	MIL-STD-810F Method 514.5 Procedure-1

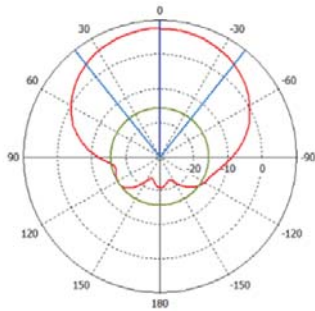
GNSS / FTS / TELEMETRY ANTENNAS

C Band Antenna

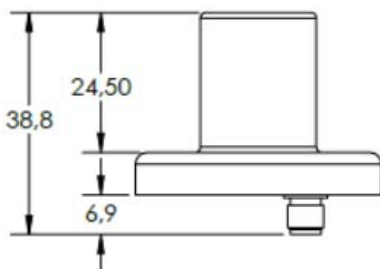
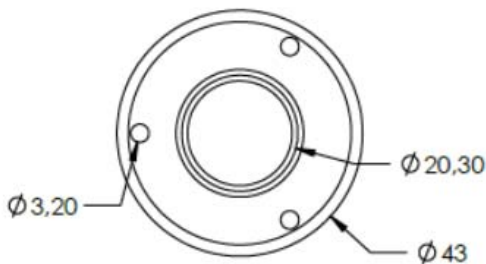
Model No:DTA050200

Features

- Airborne, UAV and Missile Applications
- Data Link Antenna
- Right Hand Circular Polarised Antenna



Azimuth Pattern



Electrical

Frequency	4 – 6 Ghz
Gain	≥ 7 dBic
Polarisation	RHCP
Beamwidth	77°
Impedance	50 ohm
VSWR	1.7:1
Connector	SMA Female

Mechanical

Dimensions	$\text{Ø}43 \times 31.4$ mm
Weight	30 g
Operating Temperature	-40° to $+85^\circ\text{C}$ (-55° to 250°C optional)

Environmental and Functional Tests

Low Temperature	MIL-STD-810F Method 502.4 Procedure-1
High Temperature	MIL-STD-810F Method 501.4 Procedure-1
Temperature Shock	MIL-STD-810F Method 503.4 Procedure-1
Low Pressure	MIL-STD-810F Method 500.4 Procedure-1
Acceleration	MIL-STD-810F Method 513.5 Procedure-2
Mechanic Shock	MIL-STD-810F Method 516.5 Procedure-1
Humidity	MIL-STD-810F Method 507.4
Vibration	MIL-STD-810F Method 514.5 Procedure-1

GNSS / FTS / TELEMETRY ANTENNAS

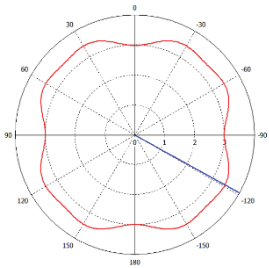


Ku Band Omni Antenna

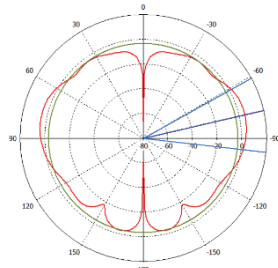
Model No:DTA150100

Features

- Airborne and UAV Applications
- Telemetry, Data Link, Transponder
- Omni Directional Pattern
- Linear Polarised Antenna
- Durable to harsh environmental conditions

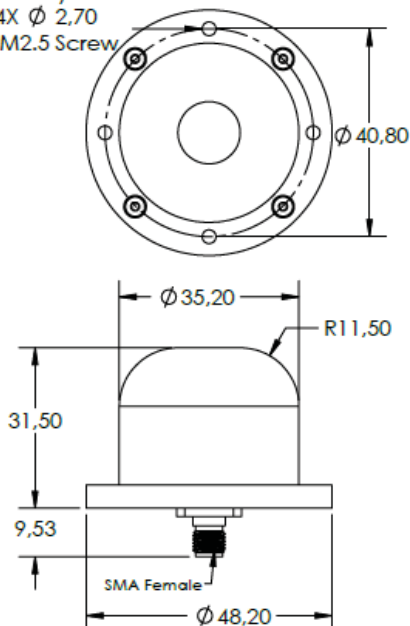


Azimuth Pattern



Elevation Pattern

Assembly Holes
4X \varnothing 2,70
for M2.5 Screw



Electrical

Frequency	Ku Band (ask for more details)
Gain	≥ 4.2 dBi
Polarisation	Linear
Beamwidth	360° (Az) x 35° (EI)
Impedance	50 ohm
VSWR	1.3:1
Connector	SMA Female

Mechanical

Dimensions	$\varnothing 48.2 \times 31.5$ mm
Weight	42 g
Operating Temperature	-40° to $+85^\circ\text{C}$ (-55° to 250°C optional)

Environmental and Functional Tests

Low Temperature	MIL-STD-810F Method 502.4 Procedure-1
High Temperature	MIL-STD-810F Method 501.4 Procedure-1
Temperature Shock	MIL-STD-810F Method 503.4 Procedure-1
Low Pressure	MIL-STD-810F Method 500.4 Procedure-1
Acceleration	MIL-STD-810F Method 513.5 Procedure-2
Mechanic Shock	MIL-STD-810F Method 516.5 Procedure-1
Humidity	MIL-STD-810F Method 507.4
Vibration	MIL-STD-810F Method 514.5 Procedure-1

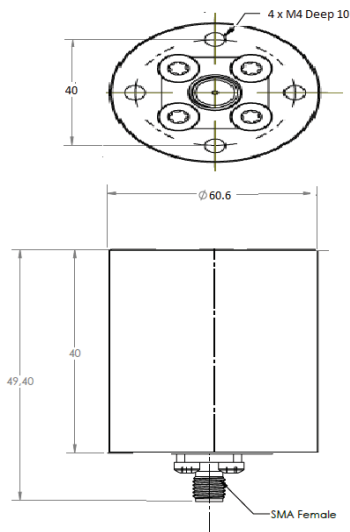
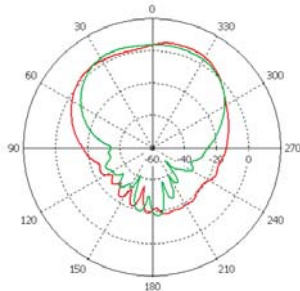
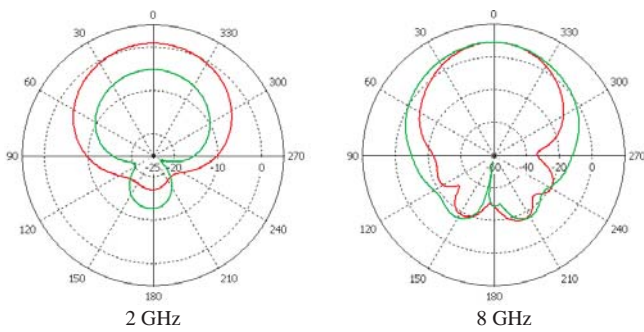
GNSS / FTS / TELEMETRY ANTENNAS

2-18 GHz Spiral Antenna

Model No:DTA180200

Features

- Airborne, UAV and Missile Applications
- Data Link Antenna
- Right Hand Circular Polarised Antenna
- Ultra Lightweight



Electrical

Frequency	2-18 GHz
Gain	≥ 0 dBic @2 GHz ≥ 8 dBic @8 GHz ≥ 5 dBic @18 GHz
Polarisation	RHCP or LHCP
Axial Ratio	3.5 Max.
Beamwidth	E-Plane: 110°-40° H-Plane: 110°-40°
Impedance	50 ohm
VSWR	2:1 Typ. 3 Max.
Connector	SMA Female

Mechanical

Dimensions	Ø60.6x40 mm
Weight	170 g
Operating Temperature	-55° to + 85°C

Environmental and Functional Tests

Low Temperature	MIL-STD-810F Method 502.4 Procedure-1
High Temperature	MIL-STD-810F Method 501.4 Procedure-1
Temperature Shock	MIL-STD-810F Method 503.4 Procedure-1
Low Pressure	MIL-STD-810F Method 500.4 Procedure-1
Acceleration	MIL-STD-810F Method 513.5 Procedure-2
Mechanic Shock	MIL-STD-810F Method 516.5 Procedure-1
Humidity	MIL-STD-810F Method 507.4
Vibration	MIL-STD-810F Method 514.5 Procedure-1

GNSS / FTS / TELEMETRY ANTENNAS

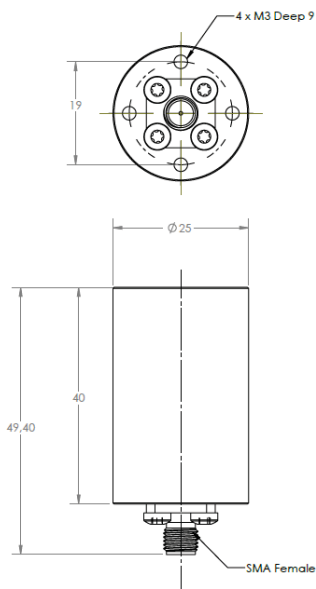
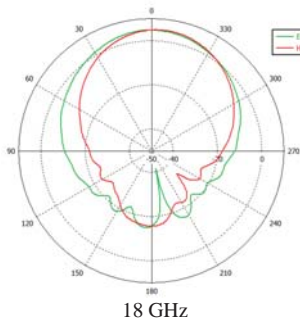
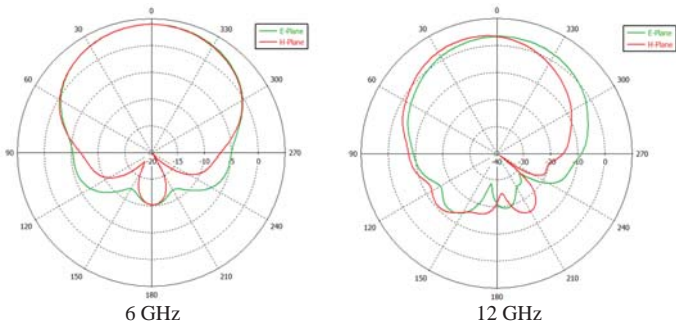


6-18 GHz Spiral Antenna

Model No:DTA180100

Features

- Airborne, UAV and Missile Applications
- Data Link Antenna
- Right Hand Circular Polarised Antenna
- Ultra Lightweight



Electrical

Frequency	6-18 GHz
Gain	≥ 4 dBic @6 GHz ≥ 4 dBic @12 GHz ≥ 4.9 dBic @18 GHz
Polarisation	RHCP or LHCP
Axial Ratio	4.0 Max.
Beamwidth	E-Plane: 110°-50° H-Plane: 100°-60°
Impedance	50 ohm
VSWR	2:1 Typ. 2.8 Max.
Connector	SMA or TNC (Female)

Mechanical

Dimensions	Ø25x40 mm
Weight	29 g
Operating Temperature	-55° to + 85°C

Environmental and Functional Tests

Low Temperature	MIL-STD-810F Method 502.4 Procedure-1
High Temperature	MIL-STD-810F Method 501.4 Procedure-1
Temperature Shock	MIL-STD-810F Method 503.4 Procedure-1
Low Pressure	MIL-STD-810F Method 500.4 Procedure-1
Acceleration	MIL-STD-810F Method 513.5 Procedure-2
Mechanic Shock	MIL-STD-810F Method 516.5 Procedure-1
Humidity	MIL-STD-810F Method 507.4
Vibration	MIL-STD-810F Method 514.5 Procedure-1



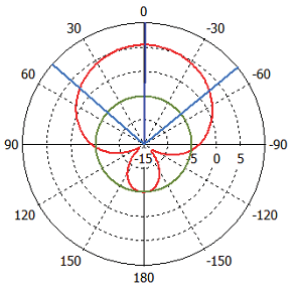
CONFORMAL ANTENNAS

Conformal GNSS Antenna \varnothing 121mm

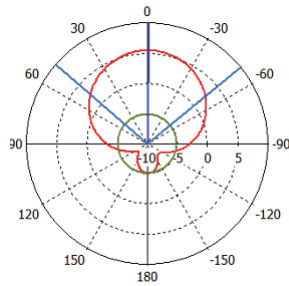
Model No: DCA015100

Features

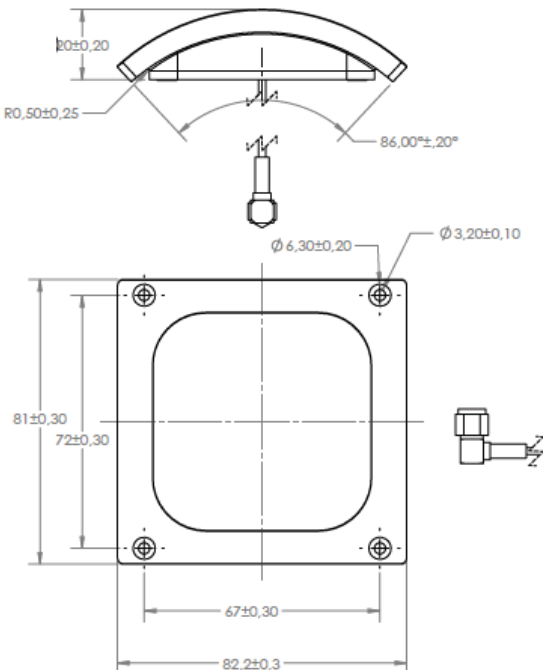
- Missile Applications
- Data Link
- Durable to harsh environmental conditions
- Operable at 400 ° C for 30 seconds
- Built to withstand extreme vibration and shock



Azimuth Pattern



Elevation Pattern



Electrical

Frequency	1.57 -1.61 Ghz
Gain	4.3 dBic
Polarisation	RHCP
Beamwidth	97 deg.
VSWR	2:1
Connector	SMA Male (with cable mounted)

Mechanical

Conformal Diameter	\varnothing 121 mm
Weight	227 g
Operating Temperature	-40° to +85°C

Environmental and Functional Tests

Low Temperature	MIL-STD-810G Method 502.5 Procedure-1 and Procedure-2
High Temperature	MIL-STD-810G Method 501.5 Procedure-1 and Procedure-2
Temperature Shock	MIL-STD-810G Method 503.4 Procedure-2
Low Pressure	MIL-STD-810G Method 500.5 Procedure-1
Acceleration	MIL-STD-810G Method 513.6 Procedure-2
Mechanic Shock	MIL-STD-810G Method 516.6 Procedure-1
Humidity	MIL-STD-810G Method 507.5
Vibration	MIL-STD-810G Method 514.7 Procedure-1

CONFORMAL ANTENNAS

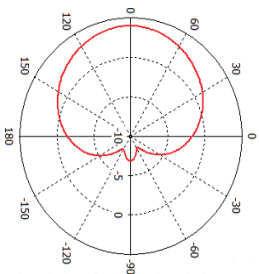


Conformal GNSS Antenna \varnothing 150mm

Model No: DCA015120

Features

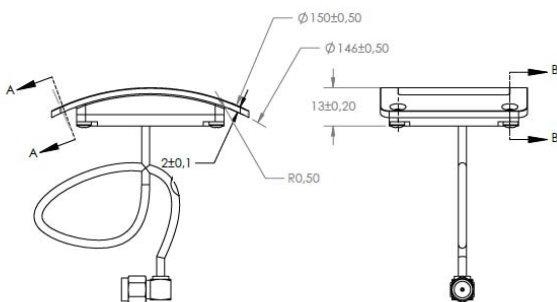
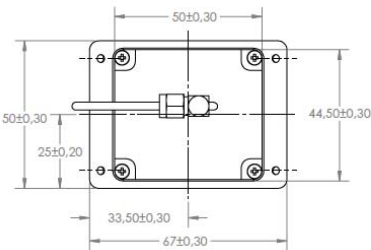
- Missile Applications
- Data Link
- Durable to harsh environmental conditions
- Operable at 450°C for 60 seconds
- Built to withstand extreme vibration and shock



Azimuth Pattern



Elevation Pattern



Electrical

Frequency	1575.42 \pm 10 MHz
Gain	3.5 dBic
Polarisation	RHCP
Beamwidth	87 deg
VSWR	2:1
Connector	SMA Male (with cable mounted)

Mechanical

Conformal Diameter	\varnothing 150 mm
Weight	140 g
Operating Temperature	-40° to + 85°C

Environmental and Functional Tests

Low Temperature	MIL-STD-810G Method 502.5 Procedure-1 and Procedure-2
High Temperature	MIL-STD-810G Method 501.5 Procedure-1 and Procedure-2
Temperature Shock	MIL-STD-810G Method 503.4 Procedure-2
Low Pressure	MIL-STD-810G Method 500.5 Procedure-1
Acceleration	MIL-STD-810G Method 513.6 Procedure-2
Mechanic Shock	MIL-STD-810G Method 516.6 Procedure-1
Humidity	MIL-STD-810G Method 507.5
Vibration	MIL-STD-810G Method 514.7 Procedure-1

CONFORMAL ANTENNAS

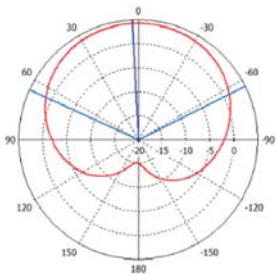


Conformal GNSS Antenna \varnothing 234mm

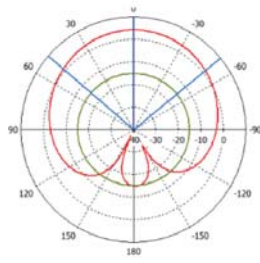
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Features

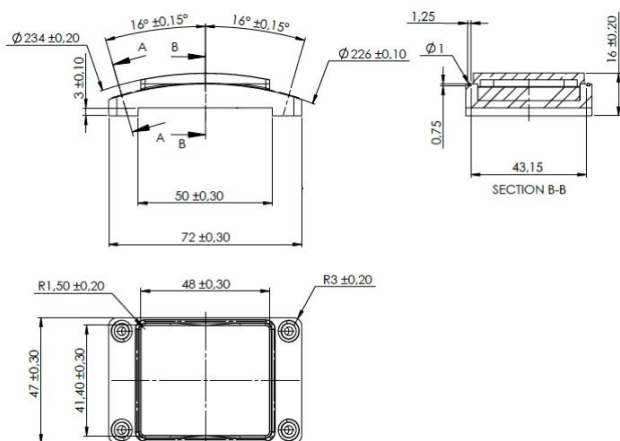
- Missile Applications
- Data Link
- Durable to harsh environmental conditions
- Operable at 450°C for 60 seconds
- Built to withstand extreme vibration and shock



Azimuth Pattern



Elevation Pattern



Electrical

Frequency	1575.42±10 MHz
Gain	4 dBic
Polarisation	RHCP
Beamwidth	98 deg
VSWR	2:1
Connector	SMA Male (with cable mounted)

Mechanical

Conformal Diameter	\varnothing 234 mm
Weight	180 g
Operating Temperature	-40° to + 85°C

Environmental and Functional Tests

Low Temperature	MIL-STD-810G Method 502.5 Procedure-1 and Procedure-2
High Temperature	MIL-STD-810G Method 501.5 Procedure-1 and Procedure-2
Temperature Shock	MIL-STD-810G Method 503.4 Procedure-2
Low Pressure	MIL-STD-810G Method 500.5 Procedure-1
Acceleration	MIL-STD-810G Method 513.6 Procedure-2
Mechanic Shock	MIL-STD-810G Method 516.6 Procedure-1
Humidity	MIL-STD-810G Method 507.5
Vibration	MIL-STD-810G Method 514.7 Procedure-1

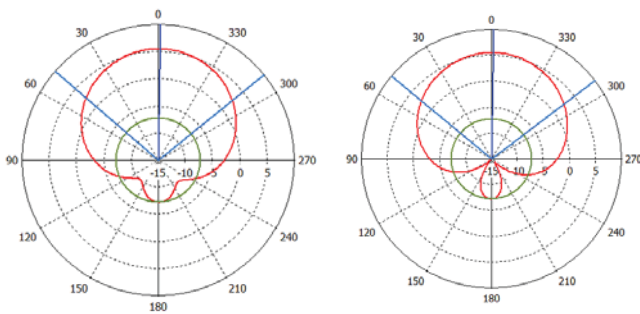
CONFORMAL ANTENNAS

Conformal GNSS Antenna Ø 610mm

Model No: DCA015140

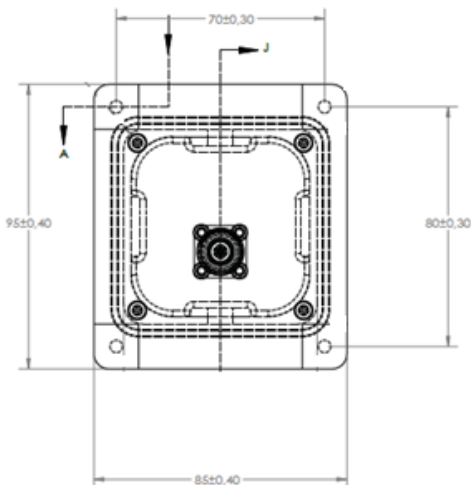
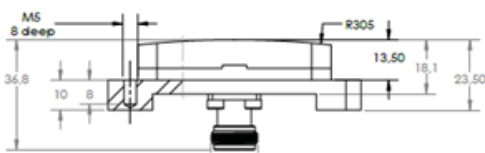
Features

- Missile Applications
- Data Link
- Durable to harsh environmental conditions
- Operable at 600°C for 60 seconds
- Built to withstand extreme vibration and shock



Azimuth Pattern

Elevation Pattern



Electrical

Frequency	1.56-1.612 GHz
Gain	5 dBic
Polarisation	RHCP
Beamwidth	103 deg.
VSWR	2:1
Front to Back	>28 dB
Connector	N (Female)

Mechanical

Conformal Diameter	Ø 610mm
Weight	440 g
Operating Temperature	-40° to + 85°C

Environmental and Functional Tests

Low Temperature	MIL-STD-810G Method 502.5 Procedure-1 and Procedure-2
High Temperature	MIL-STD-810G Method 501.5 Procedure-1 and Procedure-2
Temperature Shock	MIL-STD-810G Method 503.4 Procedure-2
Low Pressure	MIL-STD-810G Method 500.5 Procedure-1
Acceleration	MIL-STD-810G Method 513.6 Procedure-2
Mechanic Shock	MIL-STD-810G Method 516.6 Procedure-1
Humidity	MIL-STD-810G Method 507.5
Vibration	MIL-STD-810G Method 514.7 Procedure-1

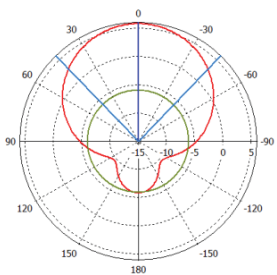
CONFORMAL ANTENNAS

Conformal Flight Termination Antenna Ø 610mm

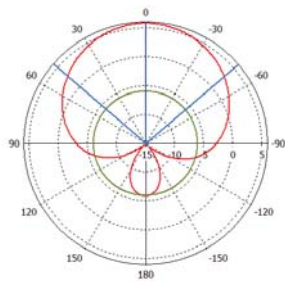
Model No: DCA016100

Features

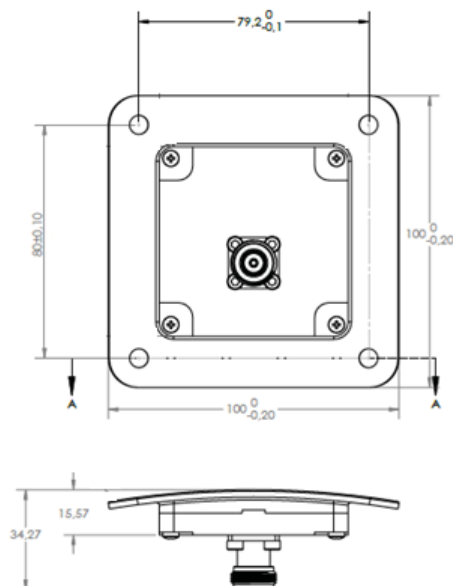
- Missile Applications
- Data Link
- Durable to harsh environmental conditions
- Operable at 600°C for 60 seconds
- Built to withstand extreme vibration and shock



Azimuth Pattern



Elevation Pattern



Electrical

Frequency	1.64-1.65 GHz
Gain	5.7 dBi
Polarisation	Vertical
Beamwidth	88° (Az) x 98° (EI)
VSWR	2:1
Front to Back	>20 dB
Connector	N (Female)

Mechanical

Conformal Diameter	Ø 610mm
Weight	420 g
Operating Temperature	-40° to + 85°C

Environmental and Functional Tests

Low Temperature	MIL-STD-810G Method 502.5 Procedure-1 and Procedure-2
High Temperature	MIL-STD-810G Method 501.5 Procedure-1 and Procedure-2
Temperature Shock	MIL-STD-810G Method 503.4 Procedure-2
Low Pressure	MIL-STD-810G Method 500.5 Procedure-1
Acceleration	MIL-STD-810G Method 513.6 Procedure-2
Mechanic Shock	MIL-STD-810G Method 516.6 Procedure-1
Humidity	MIL-STD-810G Method 507.5
Vibration	MIL-STD-810G Method 514.7 Procedure-1

CONFORMAL ANTENNAS

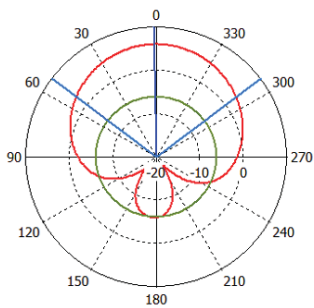


Conformal S Band Telemetry Antenna Ø 121mm

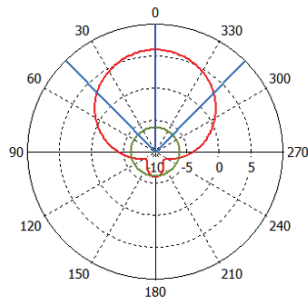
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Features

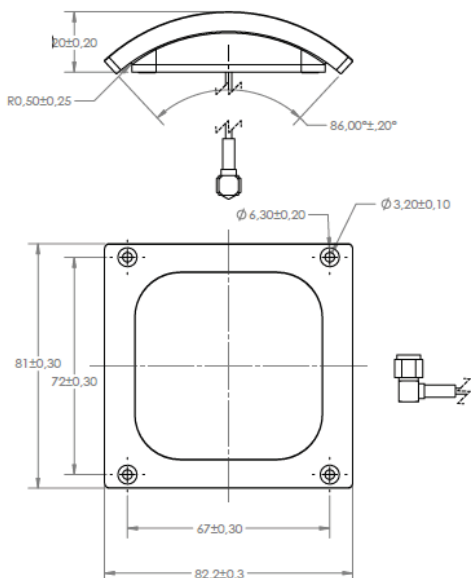
- Missile Applications
- Data Link
- Durable to harsh environmental conditions
- Operable at 400 ° C for 30 seconds
- Built to withstand extreme vibration and shock



Azimuth Pattern



Elevation Pattern



Electrical

Frequency	2.2-2.27 GHz
Gain	5.8 dBic
Polarisation	Horizontal
Beamwidth	105.7 deg
Cross Polar	>10 dB
VSWR	2:1
Connector	SMA Male or Female

Mechanical

Conformal Diameter	Ø121 mm
Weight	227 g
Operating Temperature	-40° to + 85°C

Environmental and Functional Tests

Low Temperature	MIL-STD-810G Method 502.5 Procedure-1 and Procedure-2
High Temperature	MIL-STD-810G Method 501.5 Procedure-1 and Procedure-2
Temperature Shock	MIL-STD-810G Method 503.4 Procedure-2
Low Pressure	MIL-STD-810G Method 500.5 Procedure-1
Acceleration	MIL-STD-810G Method 513.6 Procedure-2
Mechanic Shock	MIL-STD-810G Method 516.6 Procedure-1
Humidity	MIL-STD-810G Method 507.5
Vibration	MIL-STD-810G Method 514.7 Procedure-1

GNSS / FTS / TELEMETRY ANTENNAS

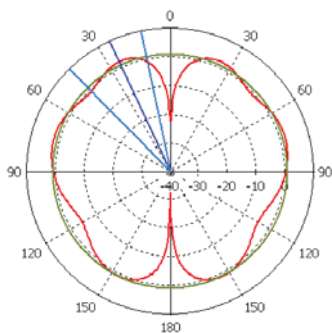


S Band Wraparound Antenna Ø150 mm

Model No: DCA022110

Features

- Missile Applications
- Telemetry, Data Link, Transponder
- Ultra Lightweight
- Built to withstand extreme vibration and shock



Elevation Pattern



Electrical

Frequency	L or S Band
Gain	0 dBi
Bandwidth	40 MHz
Polarisation	Linear
Beamwidth	Omni Directional
VSWR	2:1
Power Rating	20 W
Impedance	50 ohm
Connector	SMA (Female)

Mechanical

Weight	<200 g
Outside Diameter	Ø150 mm
Operating Temperature	-40° to +85°C

Environmental and Functional Tests

Low Temperature	MIL-STD-810G Method 502.5 Procedure-1 and Procedure-2
High Temperature	MIL-STD-810G Method 501.5 Procedure-1 and Procedure-2
Temperature Shock	MIL-STD-810G Method 503.4 Procedure-2
Low Pressure	MIL-STD-810G Method 500.5 Procedure-1
Acceleration	MIL-STD-810G Method 513.6 Procedure-2
Mechanic Shock	MIL-STD-810G Method 516.6 Procedure-1
Humidity	MIL-STD-810G Method 507.5
Vibration	MIL-STD-810G Method 514.7 Procedure-1

LNA, FILTER, COMBINER, OMT PRODUCTS

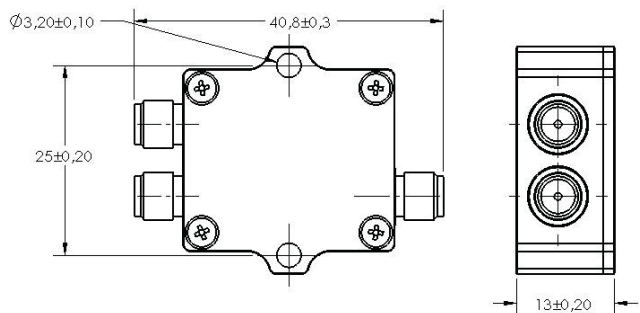


L1 Combiner and LNA

Model No: DLC015100

Features

- Designed to combine and amplify L1 antennas with pre-filter
- The input ports can be increased
- GPS and Glonass
- Excellent out-of band rejection
- Excellent gain
- Superior noise figure
- Low current consumption
- High 1 dB input compression point
- Missile and Airborne applications
- Durable to harsh environmental conditions



Electrical

Frequency	1560-1610 Ghz
Gain	29 dB
Noise Figure	max 4.8 dB
Combiner	2 input 1 output (3 input 1 output can be optionally)
Passband Ripple	±4 dB
Out of Band Rejection	< 70 dBc @1500 MHz <70 dBc @1650 MHz
VSWR	2:1
Input and Output Impedance	50 ohm
Connectors	SMA (Female)
Max RF Input	-15.5 dBm
DC supply	3.3 V (via RF output connector)
Current Consumption	15 mA

Mechanical

Weight	22 g
Operating Temperature	-40° to + 85°C

Environmental and Functional Tests

Low Temperature	MIL-STD-810G Method 502.5 Procedure-1 and Procedure-2
High Temperature	MIL-STD-810G Method 501.5 Procedure-1 and Procedure-2
Temperature Shock	MIL-STD-810G Method 503.4 Procedure-2
Low Pressure	MIL-STD-810G Method 500.5 Procedure-1
Acceleration	MIL-STD-810G Method 513.6 Procedure-2
Mechanic Shock	MIL-STD-810G Method 516.6 Procedure-1
Humidity	MIL-STD-810G Method 507.5
Vibration	MIL-STD-810G Method 514.7 Procedure-1

LNA, FILTER, COMBINER, OMT PRODUCTS

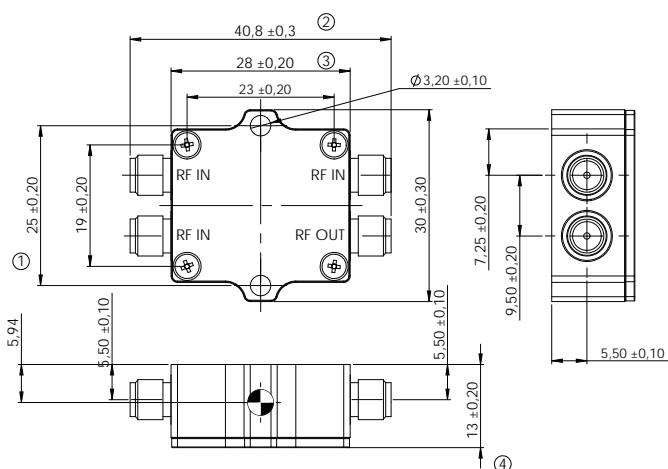


L1 Combiner and LNA

Model No: DLC015200

Features

- Designed to combine and amplify L1 antennas with pre-filter
- The input ports can be increased
- GPS and Glonass
- Excellent out-of band rejection
- Excellent gain
- Superior noise figure
- Low current consumption
- High 1 dB input compression point
- Missile and Airborne applications
- Durable to harsh environmental conditions



Electrical

Frequency	1560-1610 Ghz
Gain	24 dB
Noise Figure	max 7 dB
Combiner	3 input 1 output
Passband Ripple	±4 dB
Out of Band Rejection	< 70 dBc @1500 MHz < 70 dBc @1650 MHz
VSWR	2:1
Input and Output Impedance	50 ohm
Connectors	SMA (Female)
Max RF Input	-15.5 dBm
DC supply	3.3 V (via RF output connector)
Current Consumption	17 mA

Mechanical

Weight	30 g
Operating Temperature	-40° to + 85°C

Environmental and Functional Tests

Low Temperature	MIL-STD-810G Method 502.5 Procedure-1 and Procedure-2
High Temperature	MIL-STD-810G Method 501.5 Procedure-1 and Procedure-2
Temperature Shock	MIL-STD-810G Method 503.4 Procedure-2
Low Pressure	MIL-STD-810G Method 500.5 Procedure-1
Acceleration	MIL-STD-810G Method 513.6 Procedure-2
Mechanic Shock	MIL-STD-810G Method 516.6 Procedure-1
Humidity	MIL-STD-810G Method 507.5
Vibration	MIL-STD-810G Method 514.7 Procedure-1

LNA, FILTER, COMBINER, OMT PRODUCTS



Ka Band Transmit Reject Filter

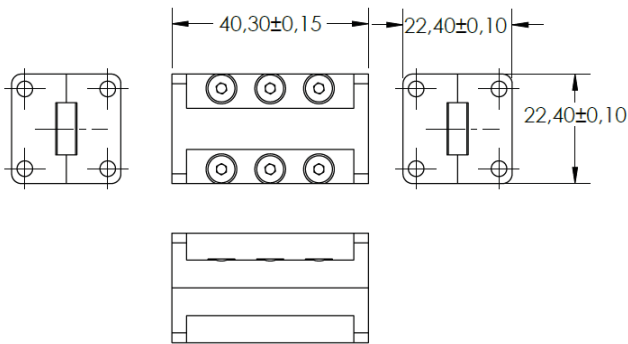
Model No:DTF200100

Features

- Compact Design
- Low insertion loss
- High Rejection
- Robust construction

Applications

- Dual Polarized Radar Antennas
- SOTM Antennas
- VSAT Antennas



TRF Technical Specification

Pass Band Frequency	19.7-20.2 GHz
Reject Band Frequency	25 - 31 GHz
Polarity	Linear
Return Loss	<15 dB
Insertion Loss	<0.3 dB
Rejection	<25 dB @ 25 GHz <40 dB @ 30 GHz
Flange for Connections	WR42

Mechanical

Weight	40 g
Operating Temperature	-40° to + 85°C

Environmental and Functional Tests

Low Temperature	MIL-STD-810F Method 502.4 Procedure-1
High Temperature	MIL-STD-810F Method 501.4 Procedure-1
Temperature Shock	MIL-STD-810F Method 503.4 Procedure-1
Low Pressure	MIL-STD-810F Method 500.4 Procedure-1
Acceleration	MIL-STD-810F Method 513.5 Procedure-2
Mechanic Shock	MIL-STD-810F Method 516.5 Procedure-1
Humidity	MIL-STD-810F Method 507.4
Vibration	MIL-STD-810F Method 514.5 Procedure-1

LNA, FILTER, COMBINER, OMT PRODUCTS



Ku Band Orthomode Transducer

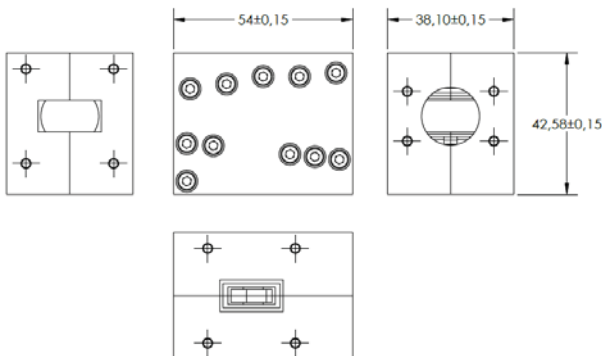
Model No:DOT120100

Features

- Compact Design
- Low insertion loss
- High Isolation
- Broadband Operation
- Robust construction

Applications

- Dual Polarized Radar Antennas
- SOTM Antennas
- VSAT Antennas
- Diplexer for Communications Links



OMT Technical Specification

Tx Frequency	13.75 - 14.5 GHz
Rx Frequency	10.75 - 12.75 GHz
Polarity	Linear, 2 pol
Return Loss	<15 dB @Rx <25 dB @Tx
Insertion Loss	<0.1 dB @Rx <0.1 dB @Tx
Flange for Connections	WR75 @ Rx WR75 @ Tx
Isolation	<55 dB
Cross Polarization	<55 dB

Mechanical

Weight	200 g
Operating Temperature	-40° to + 85°C

Environmental and Functional Tests

Low Temperature	MIL-STD-810F Method 502.4 Procedure-1
High Temperature	MIL-STD-810F Method 501.4 Procedure-1
Temperature Shock	MIL-STD-810F Method 503.4 Procedure-1
Low Pressure	MIL-STD-810F Method 500.4 Procedure-1
Acceleration	MIL-STD-810F Method 513.5 Procedure-2
Mechanic Shock	MIL-STD-810F Method 516.5 Procedure-1
Humidity	MIL-STD-810F Method 507.4
Vibration	MIL-STD-810F Method 514.5 Procedure-1

LNA, FILTER, COMBINER, OMT PRODUCTS



Ka Band Orthomode Transducer

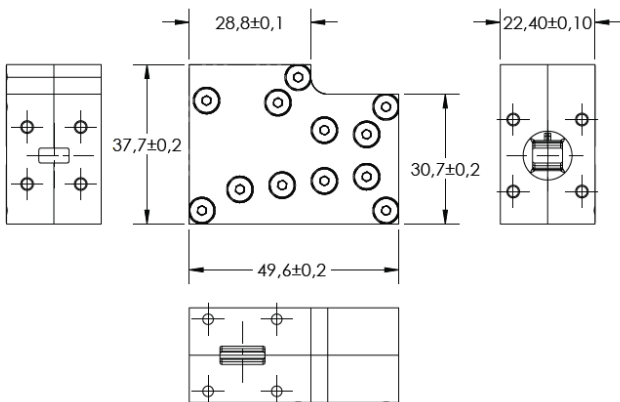
Model No:DOT200100

Features

- Compact Design
- Low insertion loss
- High Isolation
- Broadband Operation
- Robust construction

Applications

- Dual Polarized Radar Antennas
- SOTM Antennas
- VSAT Antennas
- Diplexer for Communications Links



OMT Technical Specification

Tx Frequency	29-30 GHz
Rx Frequency	19.2 - 20.2 GHz
Polarity	Linear, 2 pol
Return Loss	<15 dB @Rx <20 dB @Tx
Insertion Loss	<15 dB @Rx <0.1 dB @Tx
Flange for Connections	WR42 @ Rx WR28 @ Tx
Isolation	<30 dB
Cross Polarization	<30 dB

Mechanical

Weight	100 g
Operating Temperature	-40° to + 85°C

Environmental and Functional Tests

Low Temperature	MIL-STD-810F Method 502.4 Procedure-1
High Temperature	MIL-STD-810F Method 501.4 Procedure-1
Temperature Shock	MIL-STD-810F Method 503.4 Procedure-1
Low Pressure	MIL-STD-810F Method 500.4 Procedure-1
Acceleration	MIL-STD-810F Method 513.5 Procedure-2
Mechanic Shock	MIL-STD-810F Method 516.5 Procedure-1
Humidity	MIL-STD-810F Method 507.4
Vibration	MIL-STD-810F Method 514.5 Procedure-1

Satcom Marine



Satcom Vehicle



Manpack Antenna



MFA60PACK



67 cm Ka band Manpack VSAT Antenna System

MFA60PACK

YAHSAT, AVANTI and TURKSAT compatible

Highly efficient 67 cm 6 pieces carbon fiber reflector

Easy installation with simple connections

Light weight <15 kg



PORTABLE



- Compact
- Robust

TRANSPORTABLE



- Airline Checkable Bag
- Can be hand-carried by one person

ALL-IN-ONE



- Control Unit
- Modem
- Router (Optional)

EASY



- Installation
- 10 Minutes

CONNECT



- Via Smartphone

MULTI-USAGE



- Military
- Civil

MFA60 PACK

Antenna	67 cm 6 pieces carbon fiber antenna
Mechanism	Elevational over Azimuth
Azimuth Range	Continuous
Elevation Range	5° to 80° adjustable
Polarization	RHCP / LHCP Circular
Frequency Range (RX)	19.2 - 20.2 GHz
Frequency Range (TX)	29.5 - 30.0 GHz
Gain	Rx: 41.6 dBi @20 GHz, Tx: 45.1 dBi @29.8 GHz
HPBW	Rx: 1.4 deg, Tx: 0.9 deg
Cross Pol. Isolation	35 dB (Rx)
Operating Voltage	220V AC or 24V DC (optional)
Packaging	1 Case airline checkable bag 66 cm x 38 cm x 36 cm (WxLxH)
Weight	<15 kg net weight
Operating Temperature Range	-20°C ~ +65°C

SYSTEM BOX

Internal Satellite Modem
Internal 4 Port Ethernet Switch
4 RJ45 Ethernet Connectors
2 RJ11 FXS Connectors
SatFinder with Buzzer Indicator
Android-IOS SatFinder Application
Headphone Connector for SatFinder Buzzer
12-48 VDC Operating Voltage Range
GPS Sensor
Packaging: 30x30x9,5 (WxLxH)

BATTERY BOX

12-48 VDC Output Voltage Range
Power Capacity 3 Hours
29.4V Charging Voltage
220AC Output
OLED Display
Battery Level Display
Packaging: 30x25x10 (WxLxH)
Weight: 3 kg



VSAT AND SOTM ANTENNA SYSTEMS

Satcom On The Move Land Vehicle



Features

- Highly efficient cassegrain reflector
- Automatic satellite acquisition and tracking
- Ka-band communication
- Sensor fusion with Kalman filter
- Gyro, GPS, compass, inclinometer sensors
- Circular polarisation
- Internal signal tracking receiver
- Antenna software upgrade over Antenna Control Unit
- Ethernet, USB and RS232 interfaces
- 24 VDC or 220 VAC power options
- Typical 30 seconds lock on time
- Compliant with Hughes, iDirect, Viasat modems
- Easy installation with simple connections.
- Light weight <20 kg

MSA40 is Ka-band Satcom On The Move antenna. It automatically acquires the satellite and starts to track while vehicle is moving. It provides broadband connectivity via satellite to and land applications. It's best suited for SNG, Disaster Recovery, Mobile Office, Emergency, Security and Rural Mobile Internet services. Thanks to its cutting edge tracking technology, MSA40 provides superior connectivity even under harshest conditions. Light weight and simple three cable connection to ODU makes it easy to install the antenna. MSA40 is the perfect solution for those looking for affordable and highly reliable solution for ka-band mobile connectivity.

Reflector & Feed System

Reflector	63x50 dual reflector gregorian cassegrain antenna
Gain	Rx: 39.1 dBi@20 GHz, Tx:41.2 dBi@29.8 GHz (included OMT and polariser loss)
HPBW	Rx: 1.8 deg, Tx: 1.2 deg
Cross Pol. Isolation	27 dB (Rx)
RX Frequency	19.2 - 20.2 GHz
TX Frequency	29.5 - 30.0 GHz
RX/TX Polarisation	RHCP / LHCP Circular

Tracking System

Geometry	Elevation over Azimuth
Antenna Tracking	Conical Scanning
Pointing Error	< 0.4°
Speed	80°/s (Az and El axis)
Acceleration	100°/s ² (Az and El axis)
Azimuth Range	Continuous
Elevation Range	40° to 62°
Acquisition Time	<30 sec (connection time depends on the modem)
Tracking Source	Internal signal receiver
Sensors	Gyro, GPS, Compass, Inclinator (with Kalman Filter)
ODU Dimensions	DxH: 80cm x 40 cm
Weight	<20 kg
Operating Temperature	-20°C ~ +60°C

ACU Properties

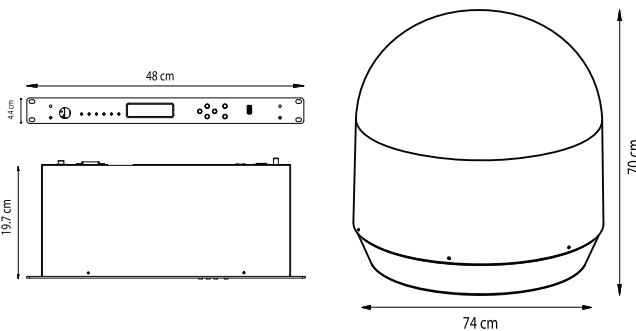
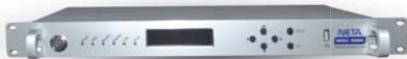
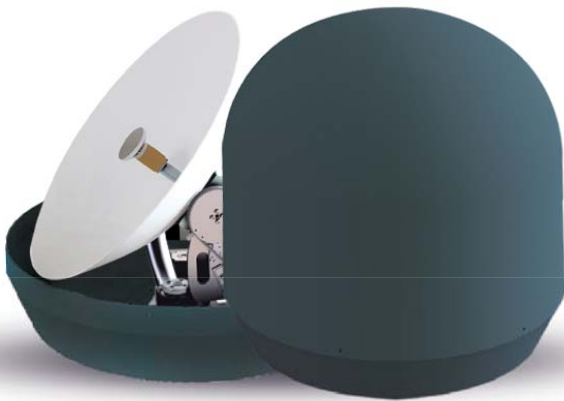
External Interfaces	LCD display, Keypad, Ethernet, USB, RS232
ODU Connection	1 x F-Connector for power and data
User Interface	OLED display, 6 buttons keypad, 6 leds and on/off
Modem Protocol	OpenAmip
Software Upgrade	Over USB or ethernet
Mount Type	19" 1U rack mount
Dimensions	HxWxD: 4.4 x 48x20 cm
Weight	4 kg
Voltage	220V AC or 12/24V DC
Power	50W (excluding BUC)

Environmental and Functional Tests

Low Temperature	MIL-STD-810F Method 502.4 Procedure-1
High Temperature	MIL-STD-810F Method 501.4 Procedure-1
Temperature Shock	MIL-STD-810F Method 503.4 Procedure-1
Low Pressure	MIL-STD-810F Method 500.4 Procedure-1
Acceleration	MIL-STD-810F Method 513.5 Procedure-2
Mechanic Shock	MIL-STD-810F Method 516.5 Procedure-1
Humidity	MIL-STD-810F Method 507.4
Vibration	MIL-STD-810F Method 514.5 Procedure-1

VSAT AND SOTM ANTENNA SYSTEMS

Satcom On The Move Marine



Features

- Highly efficient cassegrain 63 cm reflector
- Automatic satellite acquisition and tracking
- Sensor fusion with Kalman filter
- GPS, compass, inclinometer sensors
- Circular polarisation
- Internal signal tracking receiver
- Antenna software upgrade over Antenna Control Unit
- Typical 30 seconds satellite lock time
- Compliant with Telenor, Eutelsat, Avanti, Turksat and similar operators
- Compliant with Hughes, iDirect, Viasat modems
- Easy installation with simple connections

MSA60 is 63cm diameter Ka-band Satcom On The Move antenna for maritime applications. It automatically acquires the satellite and starts to track while travelling. It provides broadband connectivity via satellite. It's best suited for maritime broadband applications such as internet, voice over IP, vessel management, and monitoring. Thanks to its cutting edge tracking technology, MSA60 provides superior connectivity even under harshest conditions. Light weight and simple three cable connection to ODU makes it easy to install the antenna. MSA60 is the perfect solution for those looking for affordable and highly reliable solution for ka-band mobile connectivity.

Reflector & Feed System

Reflector	63cm dual reflector cassegrain antenna
Gain	Rx: 39.8 dBi@20 GHz, Tx:42.7 dBi@29.8 GHz (OMT and polariser loss included)
HPBW	Rx: 1.7 deg, Tx: 1.1 deg
Cross Pol. Isolation	27 dB (Rx)
RX Frequency	19.2 - 20.2 GHz
TX Frequency	29.5 - 30.0 GHz
RX/TX Polarisation	RHCP / LHCP Circular

Tracking System

Mechanism	Elevation over Azimuth
Antenna Tracking	Conical Scanning
Pointing Error	< 0.3°
Speed	80°/s (Az and El axis)
Acceleration	100°/s ² (Az and El axis)
Azimuth Range	Continuous
Elevation Range	0° - 680°
Acquisition Time	5° - 80°
Tracking Source	<30 sec (connection time depends on the modem)
Sensors	Internal DVB-S2 tuner
	Gyro, GPS, Compass, Inclinometer (sensor fusion with Kalman Filter)

Physical

ODU Dimensions	DxH:74x70cm
Weight	<20 kg
Operating Temperature	-20°C ~ +60°C

Antenna Control Unit

External Interfaces	LCD display, Keypad, Ethernet, USB, RS232
ODU Connection	1x F-Connector for power and data
User Interface	OLED display, 6 buttons keypad, 6 leds and on/off
Modem Support	Idirect, Viasat, Hughes
Modem Protocol	OpenAmip
Software Upgrade	Over USB or ethernet
Mount Type	19" 1U rack mount
Dimensions	HxWxD: 4.4x48x20 cm
Weight	3 kg

Electrical

Voltage	220V AC or 12/24V DC
Power	50W (excluding BUC)

Environmental and Functional Tests

Low Temperature	MIL-STD-810F Method 502.4 Procedure-1
High Temperature	MIL-STD-810F Method 501.4 Procedure-1
Temperature Shock	MIL-STD-810F Method 503.4 Procedure-1
Low Pressure	MIL-STD-810F Method 500.4 Procedure-1
Acceleration	MIL-STD-810F Method 513.5 Procedure-2
Mechanic Shock	MIL-STD-810F Method 516.5 Procedure-1
Humidity	MIL-STD-810F Method 507.4
Vibration	MIL-STD-810F Method 514.5 Procedure-1

VSAT ANTENNA LAND VEHICLE

Neta VSAT auto-point satellite antenna system is used for direct broadband access over any configured satellite in stationary condition. Neta VSAT platform is an auto-acquire satellite antenna system which can be mounted on the roof of a vehicle for direct broadband access over any configured satellite. The system works seamlessly with Neta VSAT Controlbox providing fast satellite acquisition.

VSAT system is easily configured to provide instant access to satellite communications for any application that requires reliable and/or remote connectivity in rugged environments. This new generation VSAT terminal delivers affordable broadband Internet services (High-speed access, video & Voice over IP, file transfer, e-mail or web browsing). Ideally suited for industries such as construction sites, mining, oil & gas exploration, military communications, disaster recovery, SNG, emergency communications backup, cellular backhaul and many others.

- Ka Band, Ku Band options,
- Autoskew option for linear polarisation services
- Single Dish, high surface accuracy, offset feed, steel reflector
- Heavy duty feed arm to support transceiver
- Two Axis Motor Controlled Acquisition
- Locates satellites using with advanced satellite acquisition methods



Reflector & Feed System

Reflector	74 cm offset elliptic antenna
Gain	Rx: 40.7 dBi @ 19.95 GHz Tx:44.5 dBi @ 29.75 GHz
HPBW	Rx: 1.5 deg, Tx: 1 deg
Cross Pol. Isolation	22 dB (Rx)
RX Frequency	19.7 - 20.2 GHz
TX Frequency	29.5 - 30.0 GHz
RX/TX Polarisation	RHCP / LHCP Circular

Tracking System

Mechanism	Elevation over Azimuth
Pointing Error	< 0.2°
Azimuth Speed	18°/sec.
Elevation Speed	10°/sec.
Azimuth Range	+/-185°
Elevation Range	0° - 80°
Positioning Sensors	GPS, eCompass, inclinometer

Physical

Dimensions (when closed)	94cmx108cmx39cm (WxLxH)
Weight	45 kg.
Operating Temperature	-15°C ~ +50°C

Antenna Control Unit

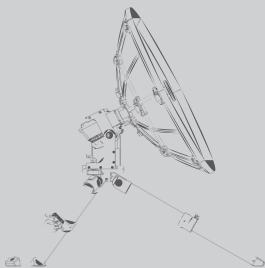
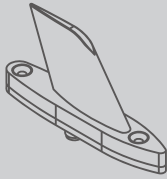
Antenna Control Unit	19" Rack Type
Satellite - Modem Connection	Single RF cable

Electrical

Operating Voltage	220V AC or 24V DC (optional)
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Environmental and Functional Tests

Low Temperature	MIL-STD-810F Method 502.4 Procedure-1
High Temperature	MIL-STD-810F Method 501.4 Procedure-1
Temperature Shock	MIL-STD-810F Method 503.4 Procedure-1
Low Pressure	MIL-STD-810F Method 500.4 Procedure-1
Acceleration	MIL-STD-810F Method 513.5 Procedure-2
Mechanic Shock	MIL-STD-810F Method 516.5 Procedure-1
Humidity	MIL-STD-810F Method 507.4
Vibration	MIL-STD-810F Method 514.5 Procedure-1



NETA

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Rev. No: 0025