SPECIFICATION

Part No: **STS.01.A.0115FB**

Product Name: Spartan Iridium Transceiver Antenna System

Features: High Performance outdoor antenna

White Housing

Cables and Connectors Customizable

IP67 & IP69K Waterproof

ISO16750 Automotive Reliability Tested

115mm Multi-Conductor Cable

Stripped 37mm, Tin 8mm

Dims: 145.6*147.5*33.35mm

RoHS Compliant

1. Introduction

The Spartan STS.01 Iridium Transceiver consists of an advanced Taoglas Iridium certified patch antenna and Iridium 9602 transceiver with RS-232 interface, all enclosed in a robust, IP67 waterproof through-hole mount enclosure.

The Iridium satellite network offers truly global M2M service with the lowest latency in the industry — extending the value of intelligent data far beyond the 10% of the Earth serviced by terrestrial networks.

Get reliable connectivity for your devices as the Iridium global satellite constellation operates at full capacity even in circumstances when terrestrial networks may run into challenges

Certified by Iridium, the Spartan STS.01 supports short burst data with a maximum mobile originated message size of 340 bytes and a maximum mobile terminated message size of 270 bytes. There is no SIM card required.

Typical applications include
- International trucking and haulage
- Remote asset monitoring
- Maritime communications
- Mining, oil and gas infrastructure monitoring
- Emergency operations
- Business continuity

The product features major advancements in reliability over existing systems, delivering
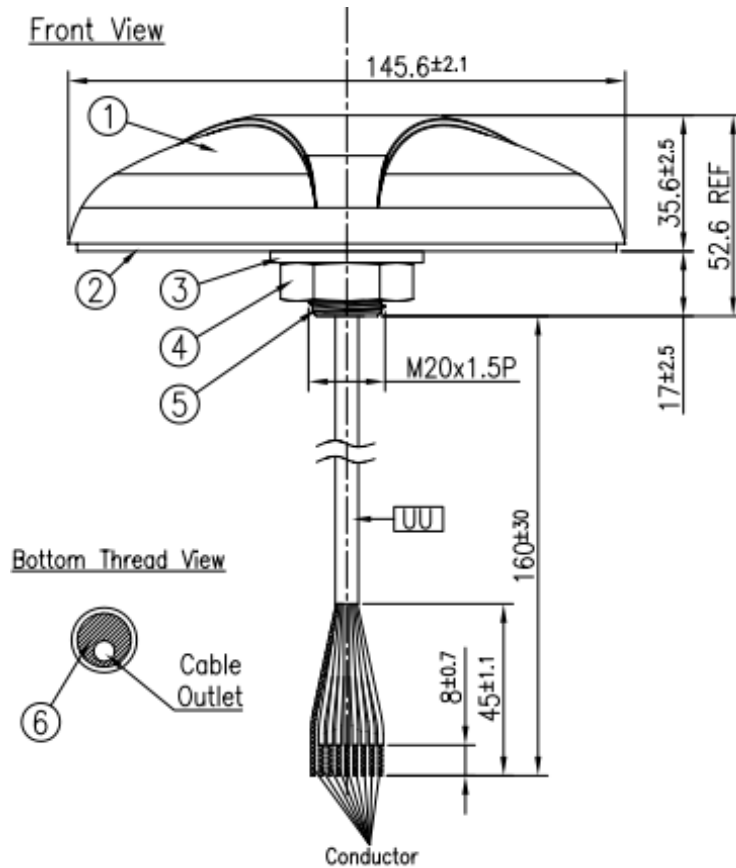
Key Benefits

- One multi-conductor cable required.

- Quick and Simple Installation

- Higher radio performance (no RF coax losses)

- Low power consumption

- Full protection against load dump

- ISO16750 Automotive Reliability Tested

2. Features

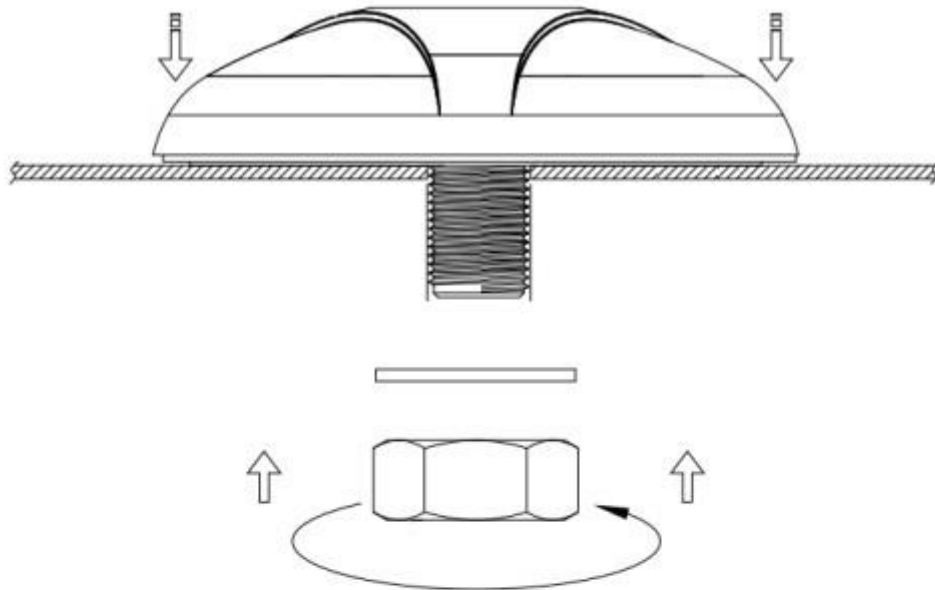| SYSTEM FEATURES	
Integrated Iridium 9602 Transceiver	Integrated power regulation with 8-32V input voltage range
3-Wire RS-232 interface	Transient and reverse voltage protection
Enable signal line	Tamper detection
Network status line	Load Dump Protection with No User Intervention (Class C)
MECHANICAL	
Enclosure: White, toughened ABS-Polycarbonate Alloy UV stabilized	Cable and Connector may be customized
IP67 Waterproof, IP69K Pressure Washing Safe	Weight: 670g
Dimensions:	145mm x 145mm x 90mm
ENVIRONMENTAL RATINGS & CERTIFICATIONS	
Temperature: -40º to +85º C (operating) -40º to +85º C (storage)	Fully certified FCC, CE, IC, Iridium
Humidity: 95% R.H. @ 50º C non-condensing	Power: 8-32V Input Range
	12W peak consumption during transmit @ 12V
	1.5W average consumption during transmit @ 12V
	1.5W peak consumption during receive/idle @ 12V
	90 mW average consumption radio off mode @ 12V
Load Dump: ISO 16750-2 (12V and 24V system)	ESD: ISO 10605 Contact 15kV, Air 15kV
Supply Immunity: ISO 16750-2 ISO 7637-2 ISO 7637-3 (12V and 24V system)	

3. Drawing

Front View

Top View
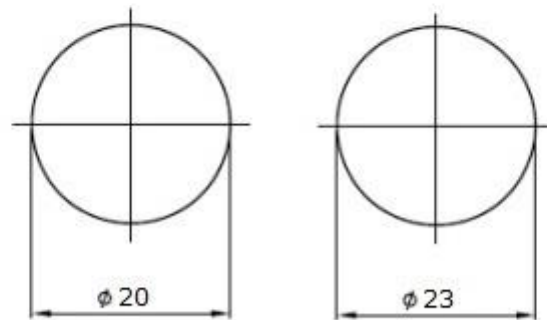
Bottom Thread View

See table for
Conductor
detail

	Name	Material	Finish	QTY
1	Housing Spartan ST	PC + ABS	White	1
2	Closed Cell Foam	3M 9448+CR-4305	Black	1
3	Nut_M20x1.5Px10H Cut	Steel	Ni Plated	1
4	Washer Nut	Steel	Ni Plated	1
5	Metal Base ST	Zinc Alloy	Ni Plated	1
6	Cable Rubber	Silicone Rubber	Black	1
UU	Cable Type	Multi-Conductor	Black	1

Conductor Color	Conductor Function
Red	Power Input (+8-32V)
Black	Power and Signal GND
Orange	On/Off Control (>1.4v Input to enable Iridium module)
Blue	Network Available (+3.3V Output)
Green	RX (Relative to Antenna Module)
Yellow	TX (Relative to Antenna Module)
Gray	Tamper Detect
White	Chassis Ground
Drain Wire	Internally connected to Chassis Ground

4. Installation

Recommended Torque for Mounting 29.4 N·m
Maximum Torque for Mounting 39.2N·m
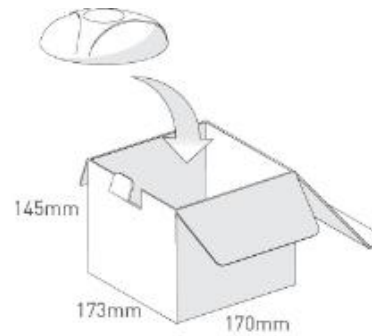

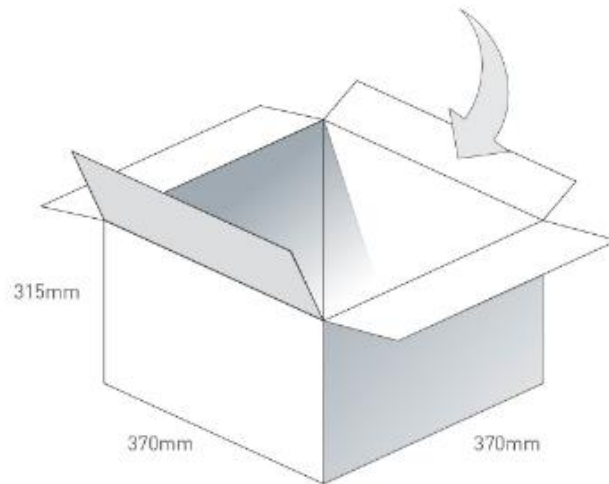|	
ϕ20	ϕ23
Thread Diameter	**Recommended Mounting Hole**

Unit: mm

5. Packaging

1pc STS.01.B.0115FB in PE bag per small box
Box Dimensions - 173*170*145 mm
Weight - 800g

145mm

173mm   170mm

8 small boxes in one carton
Carton Dimensions - 370*370*315 mm
Weight - 6.9Kg

315mm

370mm   370mm

Pallet Dimensions 1100*1100*1260mm
36 Cartons per Pallet
9 Cartons per layer
4 Layers

1260mm

1100mm   1100mm