SeaSonde SatDrive Kit

CODAR Product Code: SSDA-SATD

Product Description:

SeaSonde SatDrive is an easy-to-use satellite-based file transfer system. In the event of a storm or power or primary data link outage, SeaSonde Remote Unit output files sent to SatDrive can be forwarded via satellite to the destination of your choice or archived for long-term storage.

File Transfer

A built-in web interface is used to configure options including where to send files. Once configured, any file sent to the SatDrive "SEND" folder will be automatically forwarded to the configured final destination. Using an internal lithium ion battery, SatDrive can transmit even when local power is lost. The enclosure is ruggedized and water resistant.

File Archive

Files sent to the SatDrive "ARCHIVE" folder are kept for long-term storage. The internal memory card is ruggedized to withstand magnets, dust and over 24 hours in sea water. The memory card is designed to survive even if the SatDrive is destroyed.

Features

SatDrive is flexible. It supports most common transport protocols including rsync, rcp, FTP and SMB.

- Connects via standard 10/100mbps wired Ethernet
- Accept files via standard file transfer protocols¹
- 32-128GB permanent, ruggedized archive storage²
- When a file is placed in the specified "SEND" folder, it is sent via satellite to configured destination & moved to "SENT" folder
- SeaSonde SatDrive
 Kit installed at
 SeaSonde Remote
 Unit Site

 Iridium
 Ground
 Station

 Internet
 SeaSonde Central Management
 Data Combining Station

 Figure depicts the data/file transfer pathway

from SeaSonde Remote Unit station when using SeaSonde SatDrive Kit. Iridium subscription (not included in kit), and Internet link at the SeaSonde Central Management / Data Combining Station (not included in kit) are required for data transfer to occur.

- "HEARTBEAT" messages can be periodically sent via satellite to confirm operability
- "EXCEPTION" messages can be sent via satellite for power outages and other unexpected issues
- Notifications can be sent for each file transmitted by satellite
- Internal battery backup
- Wide temperature tolerance range of 0°C (32°F) 45°C (113°F)
- Hardened, water resistant case

SSDA-SATD Includes:

SatDrive Ruggedized Hardware
Iridium Antenna & Coaxial antenna cable (10m length)
Ethernet Cable
SeaSonde SatDrive Software License

Compatibility/Requirements (not included with kit):

- SeaSonde Radial Suite Software, Release 8 or later.
- Iridium Data Plan Subscription

¹Specific protocols may vary by model. ²Available storage may vary by model SSDA-SATD specification, v1, rev 12/2016 †Product Specifications Subject to Change Without Notice.

Specifications

Battery

Chemistry: Lithium Polymer (LiPo)

Capacity: 8Ah +/- 5% Charge Time: 8-12 hours

Temperature range: 0°C (32°F) - 45°C (113°F) Standards: UN 38.3

Power: 96Wh

Controller

Processor: 32 bit ARM RAM: 512MB

User storage: 32GB-128GB depending on model

Enclosure

Ratings IP65, IP66, IP67, NEMA 1,2,4,4X,6, UL-508 Dimensions 255mm x 180mm x 75mm(10" L x 7.1" W x 3" H)

Connections

Ethernet 10/100 RJ45

Satellite Antenna coax Power 12VDC Power monitor 3.3VDC

Transmission Speed

Wired Ethernet Up to 100Mbps Satellite Up to 2400bps

Communications

Via Ethernet rsync, scp, rcp, FTP, SFTP, NFS depending on model

Antenna Details

Weight: 311.85g (11oz)

Length: 18.7cm (7.4") x Width: 7.6cm (3") - diameter

Polarization: Right hand circular

Axial Ratio: 3 dB

Max Finish: Weatherable Polymer

VSWR: less than 2.0:1

Radiation Pattern: $0.4 \text{dBic: } 0^\circ = 0^\circ \text{m; } 1.4 \text{dBic: } 0^\circ < \text{Zenith} < 45^\circ$

-0.25dBic: 75° < Zenith < 82° Antenna Connector: TNC Female

Power: Power handling 1W

Temperature: $-40^{\circ}\text{C to} +85^{\circ}\text{C} (-40^{\circ}\text{F to} +185^{\circ}\text{F})$

Atmospheric Pressure: Altitude: 20 000 ft Rx Frequency Band; 1616 – 1626 MHz Connects to 1" Threaded Pipe (not included)