

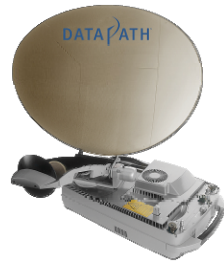
## COMPLEMENTARY SOLUTIONS AND SERVICES



SWE-DISH CCT120



SWE-DISH FA150 Fly-Away



SWE-DISH IPT MII



MaxView M&C Software



Baseband Solutions



Support Services

### About DataPath

DataPath is a global leader in creating satellite-based network solutions that solve our customers' toughest communications challenges. We specialize in enabling complex, high-bandwidth communications networks in the most urgent time frames and extreme conditions. Our communications solutions, MaxView® network management software and comprehensive services establish and maintain communications any time, anywhere. SWE-DISH Satellite Systems AB, a Stockholm-based, global leader in the design and manufacture of mobile satellite communications systems, is a wholly owned subsidiary.

SATCOM & WIRELESS SOLUTIONS | GLOBAL SERVICES | MAXVIEW SOFTWARE | SWE-DISH TERMINALS

# DATA PATH™

SWE DISH

MaxView

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MILITARY

## DATA PATH | eSAT-RA<sub>2</sub> System

### EASY AND RELIABLE SATCOM FOR COMBAT SUPPORT PROFESSIONALS

Interoperate with EoIP GIG networks – anytime, anywhere.

The DataPath eSAT-RA<sub>2</sub> system is a Combat Service Support (CSS) backwards-compatible SATCOM solution that delivers advanced communications capabilities with exceptional reliability and operational ease. eSAT-RA<sub>2</sub> is designed to enable combat support professionals to stay solely focused on their mission, not on managing their communications equipment.

No matter where conflicts arise or where forward deployed support outpost may be needed, the eSAT's light and compact design allows for easy transportation, whether by helicopter, by hummvee or on foot. Once on site, any available man-power resource can quickly assemble, deploy and establish communications on any available satellite asset.

This one-button satellite acquisition portable earth terminal provides forward deployed combat support forces the connectivity they need to run voice, video and data applications and support operational units; just as if they were in garrison. Designed using the latest COTS equipment, the eSAT-RA<sub>2</sub> is also configured for full interoperability and backwards compatibility with existing DoD networks.

### At a Glance:

#### DataPath eSAT-RA<sub>2</sub> System

(Easy SATCOM Rugged, Auto Acquiring)

- Backwards compatible with existing CSS systems
- Easy to use one-button point-and-shoot capability with intuitive GUI interface
- Transportable in three cases that weigh less than 375 lbs total and measure less than 31 cubic feet
- Rugged, quick set-up design does not require assembly when deployed
- **Ka band and X band upgradeable \*(2009)**



### DataPath eSAT-RA<sub>2</sub> System

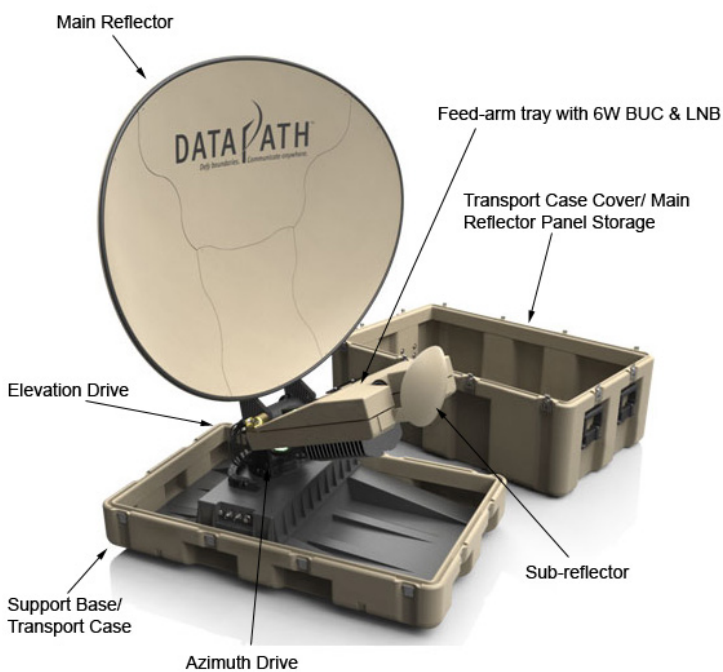
Powered by SWE-DISH® engineering

DATA PATH®  
Defy boundaries. Communicate anywhere.

## EASY TO USE

DataPath's antenna provides ease of use features that make the job easy for non-SATCOM personnel.

- Antenna Control Unit (ACU) performs automatic satellite acquisition by several modes, including reference and data satellite modes
- Antenna can be pointed and stowed manually or automatically
- "Wavy cut" pattern of the main reflector ensures correct assembly
- Feed horn assembly has visual identification of linear polarization ("H" or "V")
- No flex waveguide between BUC and feed assembly
- Single connector cable with quick disconnect (QD) between antenna and equipment cases
- Quick start guide with a pictorial view of polarization included for SATCOM networks

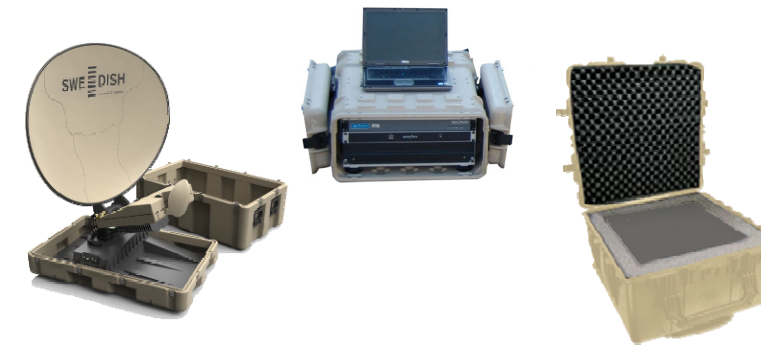


The DataPath eSAT-RA<sub>2</sub> is FCC, Intelsat, Eutelsat and ITU compliant.

ANTENNA PERFORMANCE	
Antenna type	Gregorian dual offset segmented in 4 pieces
Antenna size	1.20m (48 inches)
Polarization	Linear
Tx frequency (Ku)	14.0 – 14.5 GHz
EIRP @ P1dB @ 14.25 GHz	49.9 dBW
Rx frequency (Ku)	10.95 – 12.75 GHz
Crosspolar discrimination	>30 dB on bore sight
Antenna positioning	Motorized positioning through GPS, electronic compass and inclinometer. Manual override on all three axis.
Azimuth range	±210° in 0.1° steps
Elevation range	10°–90° in 0.1° steps
Polarization range	190° in 0.1° steps
<b>EUTELSAT and INTELSAT TX Radiation Compliance FCC #25.209 ITU-R S.528.5 specifications</b>	
DEPLOYMENT, SET-UP AND STOW	
Lift limitations	Two person lift (MIL 1472E)
Set-up	One person in less than 10 minutes
Stow	One person in less than 10 minutes
TYPICAL KU-BAND EIRP VALUES	
Band	Ku
Frequency	14.25 GHz
No of Carriers	1.00 Ea
BUC Size	6.00 watts
Antenna Gain	42.22 dBi
<b>Available EIRP</b>	<b>49.90 dBW</b>
TYPICAL KU-BAND G/T VALUES	
Antenna Size	1.2 meters
Antenna Gain	41.6 Ga dB at 11.85 GHz
Antenna Noise Temp.	32 Ta K at elev = 30°
LNB Gain	60.00 Gina dB (ratio)
VSWR	2.00 VSWR:1
Total System Noise	115.90 Ta+Tr K
<b>G/T @ 20° elevation</b>	<b>21.0 dB/K at 11.8 GHz</b>

## SIZE. WEIGHT. POWER.

Delivering what others merely promise.



Case	Antenna	Equipment	Support
Size	42.9"x27.3"x20.2"	22.5"x11.5"x30"	23.7"x24"x13.9"
Volume	13.7 cubic feet	4.5 cubic feet	4.6 cubic feet
Weight	160 lbs	85 lbs	124 lbs
Operational	-15° to +50°	-0° to +40°	-0° to +40°
Storage	-40° to +70°	-20° to +60°	-20° to +60°

To support Army logistics teams with a proven system that is reliable and easy to use, choose the DataPath eSAT-RA<sub>2</sub> system. It is a third-generation CSS terminal that is interoperable with existing GiG EoIP networks. The eSAT-RA<sub>2</sub> system is configured for operation in Ku band and upgradeable for use in the WGS constellation to address your evolving requirements.

## DESIGNED FOR SIMPLE RELIABILITY

- **Modular design of the antenna subsystem** – Feed, LNB and BUC are all part of a single assembly.
- **Ultra-compact feed design** – Dual offset feed design provides superior performance delivering 80% efficiency compared to single offset antennas at 60%.
- **Clever packaging** – Compact design allows the feed arm to be part of the antenna during deployment, operation and stowage.
- **Low weight** – Total system weight under 375 lbs – betters the maximum requirement of 600 lbs by more than 38%.
- **Field-proven one button start** – Desired satellite and subsequent settings are preloaded into the system prior to deployment. The user simply unpacks the system, applies power and pushes the "point and shoot" button.
- **Maximum elevation of 90°** – The elevation enables use of the terminal when close to the equator without feed boom manipulations or software upgrades.
- **Two axis inclinometer** – No need to level the antenna or to worry about where to place it. This aids in the fast set-up time and reduces operational constraints.
- **Temperature** – Lower temperature specification for outdoor use without need for extreme weather kit.
- **High power Ku band BUC upgrade available** – Field upgradeable up to 25 watts and up to 50 watts if required on the feed tray.
- **Ka/X band upgrade available** – Easily upgradeable in the field, the X band upgrade provides access to WGS and XTAR satellites.
- **M&C software is resident on the terminal**