

Product Brochure

DataPath 2.6m

High Performance Portability, LEO/MEO/GEO

Overview

Gilat DataPath offers a comprehensive range of portable satellite terminals designed to meet the demanding requirements of defense and government sectors. These terminals offer high-speed connectivity and are designed for ease of transport and operational simplicity. The company's portable terminals are renowned for their robust performance and rugged design, making them ideal for mission-critical operations in challenging environments.

Gilat DataPath's portable terminals are engineered to withstand harsh conditions such as wind, rain, dust, and extreme temperatures, meeting the rigorous MIL-STD-810G standard while maintaining a compact and sleek design. This durability ensures consistent and reliable communications in diverse operational scenarios, from remote field operations to disaster response situations.

DataPath 2.6m

The DataPath 2.6m is designed for LEO/MEO/GEO applications with tracking and high-performance portability in a lightweight package. The terminal features a 9-piece segmented carbon fiber composite reflector and a high performance servo control system with an assembly time under 30 minutes. Rugged transport cases compliant to two-man lift requirements are provided to safely transport the terminal until deployment.

To provide ultimate mission flexibility, Gilat DataPath has uniquely designed this terminal to have a modular architecture. The pedestal drive system can be easily changed from a cost-effective manual positioner to a motorized azimuth-over-elevation pedestal or to a motorized X-Y pedestal. The flexibility also extends to the RF subsystem where band changes among X-band, Ku-band, and Ka-band and at various power levels can be fitted to the terminal. The RF equipment is mounted so that different band kits can be installed quickly to support different missions.

The motorized azimuth-over-elevation pedestal is a rugged cost-affordable pedestal for use with GEO satellite applications or even equatorial MEO applications for locations $\geq 5^\circ$ above or below the equator. The X-Y pedestal is an optional pedestal that is easily installed to provide full-motion control and positioning for LEO, MEO, and GEO applications. This pedestal provides high-speed (up to $12^\circ/\text{sec}$) and high duty-cycle performance for the most demanding full-motion applications.

Features

- Portable packaging, ships in transit cases, sets up in 30 minutes
- Full motion X-Y pedestal with ± 90 degrees of travel in both axes
- High speed capable - up to $12^\circ/\text{second}$ each axis
- Integrated high performance servo control system with precision tracking
- Optional integrated L-band beacon receiver with spectrum analyzer
- Precision carbon fiber reflector, no special tools / bolt-together, designed for Ka performance
- Options
 - Motorized or manual elevation over azimuth mount drives
 - Higher speed drives
 - Multi-carrier X-band
 - Integrated or separately cased modems (e.g. Aquarius Pro DS, Aquarius-e, Capricorn, GLT, other 3rd party modems)



Specifications

Technical Specifications

Antenna Size	2.6m Carbon Fiber
Certifications	WGS, mPower, XTAR, Inmarsat GX (all pending)
Compliance	FCC, Eutelsat, Intelsat
Configuration	Transit case based
Frequency Bands	X, Ku, Commercial/Military Ka
M&C	MaxView®
Modems	Up to 8 per polarization
Temperature	Operating: -30 deg C to 55 deg C Storage: -40 deg C to 71 deg C
Wind Performance	30 MPH gusting to 45 MPH*
Weight	<700 lbs.
Power	1 Phase, 120–240 VAC, 50/60 Hz
Slew Speed	12°/second
Tracking	TLE, Memory, Orbit

Radio Frequency (RF)

RF Parameter	X-Band (Multi Carrier)	Ku-Band	Ka-Band
Downlink Frequency (GHz)	7.25 – 7.75	10.7 – 12.75	17.7 – 21.2
Uplink Frequency (GHz)	7.9 – 8.4	13.75 – 14.50	29.0 – 31.0**
Number of Feed Ports	4	4	4
Polarization	Circular	Linear	Circular
EIRP (dBW) Linear***	60.1	64	70.5
G/T (dB/K) @10deg Elevation	22.2	26	28

* Requires anchoring.

** Additional Commercial Ka available.

*** Based on 100W SSPB. Alternative EIRP power levels are available.