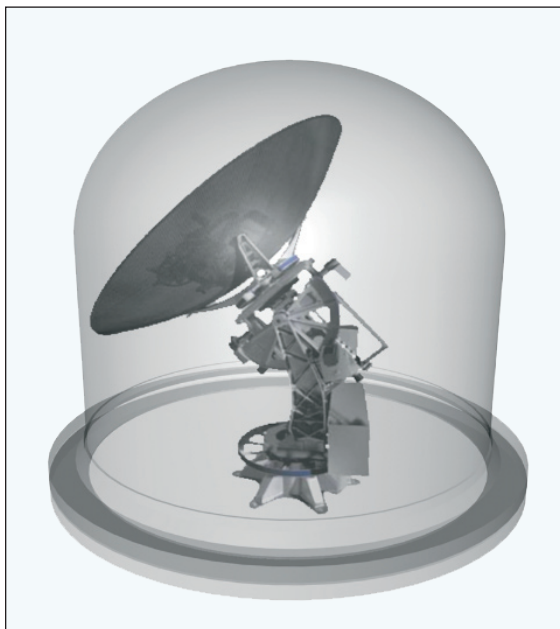


CDS 2.4 m Ka-Band Satellite Terminal

Rugged land or marine-stabilized satellite terminal allows high-speed data transfer from remote locations to users anywhere in the world, over O3b Networks MEO satellite constellation and/or CASCADE LEO satellite store-and-forward network

KEY CHARACTERISTICS

- Accurate pointing and tracking of MEO and LEO satellites
- Up to 520 Mbps forward/return user information data transfer speeds with transfer capacity of up to 5.5 TBytes per day using O3b network, or up to 2.1 Gbps information data transfer rates over CASCADE store-and-forward network
- Rugged 2.4 m Ka-band antenna system designed to meet US MIL-standards, including shock, vibration and EMC
- Efficient use of bandwidth due to implementation of DVB-S2 standard (per ETSI EN 302307) utilizing adaptive coding and modulation (ACM)
- 1.1 TBytes data storage capacity (scalable)
- PC-based, easy to use graphical user interface (GUI) and fully-automated scheduling
- Provides secondary low data rate link over L-band satellite network



GENERAL DESCRIPTION

The Satellite Terminal consists of two major sections: the Outdoor Unit (ODU) and the Indoor Unit (IDU). These sections communicate via an Inter-facility Link (IFL). The ODU includes an antenna and RF electronics. The IDU

includes system management (command and control), data processing and data storage subsystems.

For more information, please visit www.spacecourier.com

SPECIFICATIONS

ODU	
Transmit Freq.	27.6-29.1 GHz*, 29.5-30.0 GHz**
Receive Freq.	17.8-19.3 GHz*, 19.7-20.2 GHz**
EIRP	68.3 dBW/ch
G/T (90K sky noise)	24.3 dB/K**
Antenna Type	Cassegrain
Antenna Size	2.4 m
Antenna Tx Gain	55 dBi**
Antenna Rx Gain	52 dBi**
Signal Polarization	Circular
Axial Ratio	1.0
Tracking Accuracy	0.05°
Tracking Method	Gradient
Rotational Speed	100 degrees/s
Rotational Acceleration	100 degrees/s ²
Radome Size	D: 3.6 m, H: 3.4 m
ADE Weight	680 kg

IDU	
RF Interface	950-2450 MHz*, 950-1450 MHz**
Control Interface	10/100 Base-T Ethernet
Modem Type	Digital DVB-S2 ACM
Data Rates	up to 520Mbps*/ 2.1Gbps**
Error Control	Adaptive
Software	Master Control and Management Application with user friendly GUI
Operating System	Windows Server 2003 R2
Storage Capacity	1.1 TBytes
Packaging	Shock mounted 19" chassis
Size	0.89 x 0.69 x 1.05 m
Weight	170 kg

System	
Power	
AC Power	110 VAC 60 Hz
Consumption	3150 W (w/o ADE heaters)

Environmental	
Operating Temp.	-40°C to +50°C (ODU) 0°C to +50°C (IDU)
Relative Humidity	10% to 100%
Wind Speed	130 km/h
Rainfall	5 mm/h

Interfaces to User Equipment	
Data Transfer	10/100/1000 Base-T Ethernet
Internet Connection	10/100/1000 Base-T Ethernet
Navigation	NMEA 0183 RS232/422***

- * O3b network
- ** CASCADE network
- *** marine-stabilized terminal