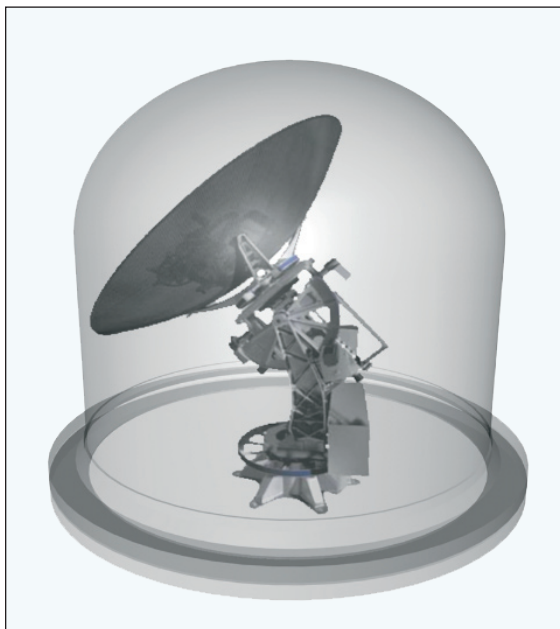


CDS 2.4 m Ka/C-Band Satellite Terminal

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, or C-band GEO satellites

KEY CHARACTERISTICS

- Accurate pointing and tracking of MEO, LEO and GEO 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 1.05 Gbps information data transfer rates over Cascade store-and-forward network, or up to 256 Kbps information data transfer rate over C-band GEO satellites
- Rugged 2.4 m Ka/C multi-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
- PC-based, easy-to-use graphical user interface (GUI) and fully-automated scheduling



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** 5.85-6.425 GHz***
Receive Freq.	17.8-19.3 GHz*, 19.7-20.2 GHz** 3.625-4.2 GHz***
EIRP	68.3 dBW/ch*, 53.0 dBW***
G/T (90K sky noise)	28 dB/K*, 18.5 dB/K***
Antenna Type	Cassegrain
Antenna Size	2.4 m
Antenna Tx Gain	55 dBi*, 41.7 dBi***
Antenna Rx Gain	51 dBi*, 38.5 dBi***
Signal Polarization	Circular*, Linear***
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	700 kg

IDU	
RF Interface	950-2450 MHz*, 950-1450 MHz**, 950-1525 MHz***
Control Interface	10/100 Base-T Ethernet
Modem Type	Digital DVB-S2 ACM
Data Rates	up to 520 Mbps*, up to 1.05 Gbps**, up to 256 Kbps***
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	19" rack chassis
Size	0.80 x 0.77 x 1.5 m
Weight	205 kg

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

Environmental	
Operating Temp.	-30°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
- *** C-band GEO
- **** marine-stabilized terminal

Cascade Data Services

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