iQ 200 Rackmount Satellite Modem

ST Engineering

The iQ 200 Rackmount is part of ST Engineering iDirect's DVB-S2/S2X modem series with a software-defined architecture for maximum flexibility and expansion. The series is compatible with both Evolution® and Velocity®, features high performance and efficiency for fixed and mobility networks so you can effortlessly meet demanding service levels and build out large networks with greater speed and reduced costs.

Ideal for enterprise, cellular backhaul and maritime applications, the iQ 200 Rackmount combines high-performance iQ series features with mobility and can reach throughputs over 300 Mbps when being used in L2oS mode. It enables the service provider to scale easily by adding more inbound throughput capabilities to the modem avoiding costly site visits or remote swap outs. It will also support high return throughput capabilities due to high Msps rate (up to 15 Msps) on the inbound and supports higher power BUCs and OpenAMIP mobility. The iQ Rackmount features a dual GigE Ethernet port and is compatible with a variety of ODU configurations. The modem's ease of installation allows services providers to deploy their services quickly, in a cost-effective way.

The iQ 200 Rackmount is also available in a board-level form factor, iQ 200 Board, ideal for terminal integration.

Markets

Government & Defense
Enterprise
SME
Maritime
Disaster Response
Oil & Gas
Land Mobility

Main Features:

- DVB-S2 (up to 45 Msps) / DVB-S2X (up to 119 Msps*) outbound
- Supports a full range of DVB-S2X MODCODS up to 256APSK
- Adaptive TDMA up to 15 Msps, 16QAM
- Ideal for both fixed and mobility applications
- Security features with 256-bit AES Link Encryption (optional)
- 10 and 50 MHz reference for BUC compatibility
- OpenAMIP compatibility for ease of integration
- Layer 2 and Layer 3 optimized
- Mesh Support

VELOCITY

EVOLUTION

iDIRECT

Network Configuration

Network Topology	Rx		Tx
	DVB-S2X*/ACM	DVB-S2*/ACM	Adaptive TDMA
Modulation	QPSK, 8PSK, 16APSK, 32APSK, 64APSK, 128APSK, 256 APSK	QPSK, 8PSK, 16APSK, 32APSK	SS-BPSK, BPSK, QPSK, 8PSK, 16QAM*
FEC	Refer to the LBA guide	LDPC 1/4 - 8/9	2D 16-State 1/3 - 9/10
Symbol Rates	5 Msps to 119 Msps*	1 Msps to 45 Msps	128 ksps to 15 Msps
Spread Spectrum*			SF: 2,4,8; Up to 7.5 Mcps

Modem Interfaces

Tx Interface

Connector	F-Type 75 Ohm
Frequency range L-band	950 - 2150 MHz
TX level	Pmax of +0 dBm to Pmin of -35dBm
BUC power supply	+24V, 4.0A max available @connector TX out
BUC reference	10/50 MHz

Rx Interface

Connector	F-Type 75 Ohm
Frequency	950-2150 MHz
LNB power supply	13 & 18VDC @ 0.5A @ connector Rx in
LNB LO selection	22 kHz on/off

Data / Management Interface

LAN: Two 10/100/1000 Mbps Ethernet

RJ 45 Console

Management

Protocols Supported

TCP, UDP, ICMP, DHCP, NAT/PAT, DNS, ROHCv2, RIPv2, IGMPv2, IGMPv3, ICMP, IPv4 (IPv6 over L2oS), L3, VRRP, BGP

Security

256-bit AES Link Encryption with X.509 Certificate (optional)

Traffic Management

Group QoS, Dedicated Carriers, Frequency Hopping, Uplink Power Control, Header Compression, TCP Acceleration

Mechanical and Environmental

Size	W 44.5 cm x D 32 cm x H 4.45cm (W 17.5 in x 12.6 in x 1.75 in)
Weight	4.5 kg (10 lbs)
Temperature:	
Operating	0° to +60℃ (32° to +140°F)
Storage	-40° to +85℃ (-40° to +185°F)
Humidity:	
Operating	10 - 90% non-condensing
Storage	5 - 95% non-condensing

Power Supply

Input Voltage	100-240VAC, 50-60Hz 36-76VDC (with DC power supply)

* Feature is release and platform dependent

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ESATCOM INC