

# iQ 200 Rackmount Satellite Modem



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<sup>®</sup> and Velocity<sup>®</sup>, 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. Its licensable features enable 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

- Enterprise
- SME
- Maritime
- Disaster Response
- Oil & Gas
- Land Mobility

## Main Features:

- DVB-S2 (up to 45 Msps) / DVB-S2X (up to 100 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

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## 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 1/2 - 6/7
Symbol Rates	5 Msps to 100 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, 18, 21VDC @ 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 (optional)

## 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°C (32° to +140°F)
Storage	-40° to +85°C (-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)
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\* Feature is release and platform dependent