

iQ Desktop+ Satellite Modem



The iQ Desktop+ is part of ST Engineering iDirect's DVB-S2/S2X modem series based on 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.

The iQ Desktop+ features dual Gigabit Ethernet VLAN-aware networking ports and a very small form factor ideal for prosumer, broadband access, and small enterprise site networks supporting a large range of applications including Internet/Intranet access, SCADA, Voiceover-IP (VoIP), video streaming, and multicasting. The iQ Desktop+ can reach throughputs up to 200 Mbps when being used in L2oS mode and is compatible with a variety of ODU configurations. The modem's high performance modulation techniques enable network operators to offer various throughput intensive services in a cost-effective way. Packaged in a professional grade metal enclosure, this modem can operate at a temperature range up to 50 degrees Celsius.

The iQ series modems are also available as a 1U rackmount or board level product.

VELOCITY

EVOLUTION

Markets

Enterprise
SME
Broadband

Main Features:

- DVB-S2 (up to 45 Msps) / DVB-S2X (up to 119 Msps) outbound
- DVB-S2X MODCODS up to 256APSK
- Adaptive TDMA up to 7.5 Msps, 16QAM modulation
- Ideal for both fixed and mobility applications
- 256-bit AES Link Encryption (optional)
- Easy to use and install with remote commissioning systems
- Layer 2 and Layer 3 optimized





Network Configuration

Network Topology	Rx		Tx
	DVB-S2X*/ACM	DVB-S2*/ACM	Adaptive TDMA
Modulation	QPSK, 8PSK, 16APSK, 32APSK, 64APSK, 128APSK, 256APSK	QPSK, 8PSK, 16APSK, 32APSK	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 119 Msps	1 Msps to 45 Msps	128 ksps to 7.5 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	950-2400 MHz
TX level	Pmax of +0 dBm to Pmin of -35 dBm
BUC power supply	+24V, 2.3A** (max) @ connector Tx out
BUC reference	10/50 MHz

Rx Interface

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

Data / Management Interface

LAN:	Two 10/100/1000 Mbps Ethernet
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* Feature is release and platform dependent

**65W AC PSU:	40°C: Combined Tx & Rx port power not to exceed 43W 50°C: Combined Tx & Rx port power not to exceed 36W
65W DC PSU:	50°C: Combined Tx & Rx port power not to exceed 43W
90W PSU:	40°C: Combined Tx & Rx port power not to exceed 65W 50°C: Combined Tx & Rx port power not to exceed 56W

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 18.28 cm x D 11.17 cm x H 4.44 cm (W 7.2 in x D 4.4 in x H 1.75 in)
Weight	0.41 kg (0.91lb)
Operating Temp.	65W AC PSU: 0° to +50°C (32° to +122°F), 53W max pwr consumption 0° to +40°C (32° to +104°F), 65W max pwr consumption 65W DC PSU: 0° to +50°C (32° to +122°F), 65W max pwr consumption 90W AC PSU: 0° to +50°C (32° to +122°F), 75W max pwr consumption 0° to +40°C (32° to +104°F), 90W max pwr consumption Storage Temp. -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 12-36VDC
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