



**> Model 2020 Terminals**

EMS Satellite Networks Enterprise Model 2020 terminals are full-featured DVB-RCS compliant terminals. These rack-mountable units are a slim 1U form factor.

The Model 2020 offers simple connectivity to your corporate LAN and is one of the fastest satellite interactive terminals available today. A truly corporate solution, the Model 2020 is designed to provide enterprise level quality of service demanded of today's connected world.

As a replacement to your existing T1 line or as a backup, the Model 2020 always-on performance provides bandwidth when you need it. Designed to support up to 36Mbps on the forward link and up to 4 Mbps on the return channel

**Features:**

- Up to 36Mbps downstream; up to 4Mbps upstream
- Web Based Control Panel;
- Easy-to-configure Ethernet connectivity to your LAN or Router;
- Complete turnkey solution, you are on-line in hours;
- On-board TCP acceleration and IPSec options
- Application QoS
- Support for Multiple Subnets
- Fully upgradeable design

**Sample Markets:**

- Enterprise/Corporate
- Government
- WiFi / Community hot spots
- Education
- Telemedicine
- Broadcast / SNG / Content Origination
- Multi-Dwelling/Tenant Units
- Cable Head end/Last Mile

**Sample Applications:**

Email and Web Browsing, File Transfer, Video Streaming, VPN, VoIP, Cable Head-end, Video Conferencing, Corporate Networking, Multicasting, Broadcasting, Thin client, Video-On-Demand, Backup, Distance Learning, Point-Of-Sale, SCADA.



<b>EMS SIT MODEL 2020 FEATURES &amp; SPECIFICATIONS</b>	
<b>Sample Services</b>	DVB-RCS, TCP/IP, UDP/TCP, Unicast, Multicast, Broadcast
Protocols	FTP, HTTP, SNMP, ICMP, IGMP
Air Interface	DVB-RCS: MPEG/DVB-S downstream; ATM or MPEG / MF-TDMA upstream
Coding	Concatenated Reed-Solomon and Convolutional FEC on both directions, as well as turbo coding upstream
Modulation	QPSK Receive; QPSK Transmit
Data Rates	Up to 36Mbps downstream and up to 4Mbps Upstream
Upstream Burst Rates	64kbps – 4Mbps in 16kbps increments depending on model
Network Interface	Ethernet 10/100 BaseT
ODU Interface	L-Band Rx; L-Band Tx
TCP Acceleration	EMS PEP & compression, optional on some models
Security	IPSec, optional on some models
IP Networking	DHCP and other routing options on some models
Network Management	SNMP Compatible, Web access, over the air S/W upgrade
Maximum BUC Size	1-8W, depending on model, internal vs external
Supply Voltage	100-240 VAC; 50Hz / 60 Hz
Certifications	CE, FCC, UL, CSA
Outdoor Units should be dimensioned for each satellite & application on a case by case basis to satisfy needs & requirements	Variables - Data Rate - Dish size - Tx Power - Link Quality - Availability
<b>Frequency Combinations</b>	<b>Potential dimensioning sets</b>
Ka/Ku	128kbps: 75cm/1W
	512kbps: 90cm/1W
	2.048Mbps: 1.2M/2W
Ku/Ku	128kbps: 90cm/1W
	1.024Mbps: 1.2M/2W
	2.048Mbps: 1.8M/ 4W
C/C	4.096Mbps: 1.8M/ 8W (2.4m also available) (external power supply)
	128kbps: 1.2M/5W (external power supply)
	256kbps: 1.8M/5W (external power supply)
	512kbps: 1.8M/10W (external power supply)

**DVB**  
Digital Video  
Broadcasting

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### > Model 3020 Terminals

EMS Satellite Networks Professional/SOHO Model 3020 terminals are DVB-RCS compliant terminals, optimized for a low-cost professional feature set. The attractive design and small form-factor make it ideal as a cost-effective, desktop high-speed solution.

The Model 3020 offers simple connectivity directly to a PC or small LAN. A truly professional solution, it's an out-of-the-box, ready-to-go low cost broadband solution for any office.

As a replacement for a Cable or DSL connection, as a backup solution or in underserved regions, the Model 3020 performance provides bandwidth when you need it. Designed to support up to 12 Mbps on the forward link and up to 2 Mbps on the return channel the Model 3020 Terminal is ideally suited for your small business needs.

### Features:

- Up to 12Mbps downstream; up to 2Mbps upstream
- Web Based Control Panel
- Easy-to-configure Ethernet connectivity to your PC, LAN or Router
- On-board TCP acceleration and IPSec options
- Application QoS
- Installs in a few hours
- Small size, Low cost

### Sample Markets:

- Small-Medium Enterprises
- Professionals
- Small Office/Home Office

### Sample Applications:

Email and Web Browsing, File Transfer, Video Streaming, VoIP, Video Conferencing, Private Networking, Thin client, Video-On-Demand and Distance Learning.



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Protocols	FTP, HTTP, SNMP, ICMP, IGMP
Air Interface	DVB-RCS: MPEG/DVB-S downstream; ATM or MPEG / MF-TDMA upstream
Coding	Concatenated Reed-Solomon and Convolutional FEC on both directions, as well as turbo coding upstream
Modulation	QPSK Receive; QPSK Transmit
Data Rates	Up to 12Mbps downstream and up to 2Mbps Upstream
Upstream Burst Rates	64kbps – 2Mbps in 16kbps increments
Network Interface	Ethernet 10/100 BaseT
ODU Interface	L-Band Rx; L-Band Tx
TCP Acceleration	EMS PEP optional
Security	IPSec, optional
Network Management	SNMP Compatible, Web access, over the air S/W upgrade
Maximum BUC Size	2W (internal power supply)
Supply Voltage	100-240 VAC; 50Hz / 60 Hz
Certifications	CE, FCC, UL, CSA
Outdoor Units should be dimensioned for each satellite & application on a case by case basis to satisfy needs & requirements	Variables - Data Rate - Dish size - Tx Power - Link Quality - Availability
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