



WPM 1600R

The Polytron WPM 1600R is a strong modular TV/ video headend mountable on a 4U rack space suitable for DTV/ IPTV system for Educational Institutions, residential complexes, Hotels, Hospitals etc. This is a highly reliable product with dual power supply and with good signal to noise ratio and less power consumption, ideal for oil and gas accommodations due to the above features.

The WPM Modules are embedded with all the latest features for both CATV and IPTV systems required for commercial and professional installations.

WPM 1600R can hold up to hot-swappable modules which makes the unit easy to manage the high density content delivery requirements such as receiving, descrambling, encoding, multiplexing and modulating.

FEATURES

- ◆ Up to 16 modules in 4U rack space
- ◆ Service level multiplexing
- ◆ Analysis and Regeneration of PSI/ SI
- ◆ Designed with low noise technology
- ◆ Up to 64 Coaxial inputs (DVB-S/S2/S2X, 8VSB and more)
- ◆ Up to 64 HDMI inputs
- ◆ Hot-swappable modules
- ◆ Service-level monitoring
- ◆ Dual redundant PSUs
- ◆ Scalable and Flexible
- ◆ User friendly web UI for configuration and upgrades
- ◆ Low power consumption and high reliability with MTBF (Mean Time Between Failure) - 100,000 hours



WPM 1600R is the powerful and reliable modular video processing head end by Polytron. The Sub-rack equipped with dual power supply and can accommodate up to sixteen modules. Embedded Ethernet switch and diverse range of hot-swappable input/output options, WPM 1600R is a highly reliable and flexible solution suitable for a variety of applications such as Hospitality, Education Residential townships etc... Offering an excellent balance of performance VS value, the WPM 1600R is ideal for dense multi-channel encoding, signal reception, digital turn around, and simultaneous IPTV + QAM distribution without an excessive power consumption and space utilisation. Backed by a worldwide based support team and an intuitive Web-Interface, the WPM 1600R is easy for any institutions to deploy and operate.

Technical Specifications/ Features	
Service level multiplexing	
4 x Gigabit RJ45 (embedded) : MPEG TS over UDP/RTP multicast/unicast SPTS/MPTS Max. 120 inputs and 120 outputs	
Power Supply	Dual Redundant
Input Voltage	100~240 VAC/50-60Hz
Power Consumption	Max. 350W
Chassis Dimension (W x H x D)	480mm x 177mm x 345mm (18.90" x 6.97" x 13.58"), 4RU
Operating Temperature	0°C~50°C (32°F ~ 122°F)
Storage Temperature	-10°C~70°C (14°F ~ 174.2°F)
Operating Humidity	<95%
MTBF	100,000 hours

WPM 8SIP

DVB-S/S2/S2X FTA Receiver Module

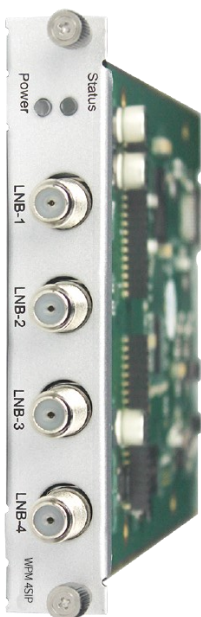


Technical Specifications

Input	C/Ku Band, 8 channels via 8 RF female connectors
LNB Power	Independent power supplies for each LNB
LNB Voltage	13V/18V
LNB Current	Max. 400mA
Constellation	DVB-S: QPSK, 8PSK DVB-S2: QPSK, 8PSK, 16APSK, 32APSK DVB-S2X: QPSK, 8PSK, 16APSK, 32APSK, 64APSK
Frequency Range	950~2150MHz
Signal Level	-70~-20dBm
Roll-off Factor	0.15, 0.20, 0.25, 0.35)
Symbol Rate	DVB-S: 1~45Msps DVB-S2: 1~45Msps DVB-S2X: 1~34 Msps
FEC	DVB-S: 1/2, 2/3, 3/4, 5/6, 7/8 DVB-S2: 1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10 DVB-S2X: 11/15, 7/9, 4/5, 5/6 (Normal FEC FECFRAME)
Power Consumption	Max. 30W

WPM 4SIP

DVB-S/S2/S2X FTA Receiver Module



Technical Specifications

Input	C/Ku Band, 4 channels via 4 RF female connectors
LNB Power	Independent power supplies for each LNB
LNB Voltage	13V/18V
LNB Current	Max. 400mA
Constellation	DVB-S: QPSK, 8PSK DVB-S2: QPSK, 8PSK, 16APSK, 32APSK DVB-S2X: QPSK, 8PSK, 16APSK, 32APSK, 64APSK
Frequency Range	950~2150MHz
Signal Level	-70~-20dBm
Roll-off Factor	0.15, 0.20, 0.25, 0.35)
Symbol Rate	DVB-S: 1~45Msps DVB-S2: 1~45Msps DVB-S2X: 1~34 Msps
FEC	DVB-S: 1/2, 2/3, 3/4, 5/6, 7/8 DVB-S2: 1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10 DVB-S2X: 11/15, 7/9, 4/5, 5/6 (Normal FEC FECFRAME)
Power Consumption	Max. 30W

WPM 4SIP CI

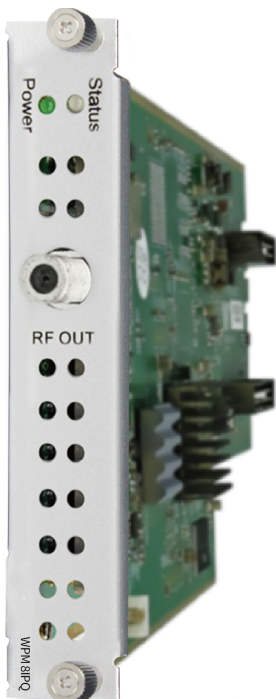
DVB-S/S2/S2X with CI Receiver Module



Technical Specifications	
Input	C/Ku Band, 4 channels via 2 RF female connectors CH1 & CH2 via LNB-1 CH3 & CH4 via LNB-2
LNB Power	Independent power supplies for each LNB
LNB Voltage	13V/18V
LNB Current	Max. 400mA
CI	2 x PCMCIA CI slots
CAM	Descrambled channel quantity depends on CAM capability, 2 CAMs could be different
Constellation	DVB-S: QPSK, 8PSK DVB-S2: QPSK, 8PSK, 16APSK, 32APSK DVB-S2X: QPSK, 8PSK, 16APSK, 32APSK, 64APSK
Frequency Range	950~2150MHz
Signal Level	-70~-20dBm
Roll-off Factor	0.15, 0.20, 0.25, 0.35)
Symbol Rate	DVB-S: 1~45Msps DVB-S2: 1~45Msps DVB-S2X: 1~34 Msps
FEC	DVB-S: 1/2, 2/3, 3/4, 5/6, 7/8 DVB-S2: 1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10 DVB-S2X: 11/15, 7/9, 4/5, 5/6 (Normal FEC FECFRAME)
CA System	Supports mainstream CAS
Power Consumption	Max. 30W

WPM 8 IPQ

QAMA Modulation Module



Technical Specifications	
Output	8 agile frequencies via 1 RF female connector 75
Standard	ITU-T J.83 Annex A/C
Frequency Range	47~1002MHz
Bandwidth	8 agile frequencies via 1 RF female connector 75 ITU-T J.83 Annex A/C 47~1002MHz 6/7/8MHz
Constellation	16QAM/32QAM/64QAM/128QAM/256QAM
Symbol Rate	3.6~6.9 Ms/s
Output Level	Max. 105dBV
MER	42dB
Power Consumption	4CH: Max. 23W; 8CH: Max. 27W

WPM 4HIP

HDMI Encoder Module



Technical Specifications	
Input	4 channels via 4 HDMI female connectors (HDMI 1.4)
Video	H.264/AVC HD: MP/HP@L4.0 SD: MP/HP@L3.0 MPEG-2 SD: MP@ML
Resolution	SD: 576i50, 480i59.94 HD: 1080p-25/30/50/59.94/60 1080i-50/59.94/60 720p-50/60 *Output resolution supports up to 1920*1080p30
Bitrate Control	CBR
Video Bitrate	1,000~14,000Kbps
GOP Structure	IBBP, IPPP, IBP
GOP Size	6~63
Aspect Ratio	Automatic or Manual
Audio	MPEG-1 Layer II, AC3 (optional), AAC (optional)
Audio Bitrate	32~384Kbps
Audio Mode	Stereo (2.0, including downmix)
Audio Sampling Rate	48kHz
Audio Volume Leveling	-20dB~20dB
Power Consumption	Max. 12W

WPM 5IP ASI

5-Port ASI Module



Technical Specifications	
Connector	5*ASI port, BNC female
Bit rate	500Kbps to 150Mbps
Reception/ Transmission mode	Byte mode(Continuous mode) Packet mode (Burst mode)
Packet Length	188 Bytes or 204 Bytes
Working mode	3 ASI input ports, 2 ASI output ports by default, each port can be redefined as ASI input or ASI output port
Multiplexing	Support PSI/SI or PSIP table regeneration PID filtering External PID insertion
Power Consumption	Max. 16 W