Modular Digital TV Headend



DMM-2200MX-Plus Series Re-Multiplexer and Scrambler module

DMM-2000MX-Plus is a series of high-density advanced DVB transport stream re-multiplexer modules. It can receive SPTS and MPTS from both GbE and ASI input ports. By using the user-friendly web control interface, the input TS is demuxed to SPTS, then routed to the ASI and GbE output ports to build new SPTS and MPTS with PSI/SI regeneration or pass through. It can support up to 256 PID or 32 TV services per TS with re-mapping, bypass, filtering functions. PCR jitter is improved by PCR correction and re-stamping features.

As an advanced option, DMM-2200MX can provide with DVB scrambling functions. It cansupport BISS-1, BISS-E and Simulcrypt modes by using the DVB common scrambling algorithm and built-in CW generator.

With its multiple TS over ASI and IP input and output ports, flexible configuration and powerful TS processing ability, DMM-2200MX-Plus is a key routing equipment that links the TV sources From professional IRDs and encoders to DVB modulators in the headend system.

PBI DMM-2200MX-Plus TSI II DAI CA STO II DAI CA Reset II III DAI ASS IN Reset III III DAI ASS IN TO III DAI TO III DA

Features

- MPEG-2 and MPEG-4/H.264 TS Re-Multiplexing
- BISS-1/E, Simulcrypt mode Scrambling (DMM-2200MX-TP-Plus only)
- Support location or remote CAS Simulcrypt (DMM-2200MX-TP-Plus only)
- TS Input and Output from ASI and IP
- Full duplex port up to 860Mbps TS in and 860Mbps TS out
- Support UDP/TCP/RTP, Multicast and Unicast modes
- Null packet insertion for TS/IP transmission
- · Maximum processing of 32 services or 256 PIDs per TS
- · Service, component, data de-multiplexing, filtering and re-multiplexing
- PCR re-generation and correction function
- PID and service remapping, bypass, filtering, conflict detection
- PSI/SI re-generation, insertion, NIT and SDT edition
- · EIT bypass or re-generation
- TS Analyzer with TS, service bit rate and alarm supervision
- Web remote control and SNMP supervision

Order Information

Model Interface	DMM-2200MX-Plus	DMM-2200MXTP-Plus
ASI in	×8	×8
ASI out	×4 ×4	
Remultiplexer	•	•
DVB Scrambing		2 TS
TS/IP (GbE)	×2	×2
Ethernet Management	×1	×1
TS/IP in	32TS per port 32TS per port	
TS/IP out	32TS Total, including 4*MUX TS 32TS Total, including 4*MUX T	



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Specification

ASI Ports		
ASI Input	8xBNC, 75Ω	
ASI Output	4xBNC, 75Ω	
Standard	DVB-ASI, EN50083-9	
Data mode	BYTE or BURST auto-detection	
Packet Length	188 /204 bytes, auto-detection	
Signal Level	200-800mVpp±10%	
Reflection loss	15dB	
TS over IP		
Transmission mode	Multicast or Unicast, IGMP V2/V3, UDP/	
Number of streams	64, 128 or 256	
Input and output Bit Rate	Maximum 860Mb/s	
Encapsulation	UDP or UDP/RTP 1-7 TS packets in each IP packet	
PCR clock reference	PCR regeneration	
Connector type	1000M Ethernet RJ-45	
TS Processing		
Maximum TS	64 TS from IP and 8 TS from 8 ASI	
Maximum service	64 services from each of 8 ASI port, 32services, during PCR regeneration 64 services from each of 64 TS over IP	
Service management	Local service building Live service input pass through, stop, filtering, sharing and redundancy Service proprieties' edition and modification	
Component management	Local component building Live component input pass through, stop,filtering, sharing, redundancy	
EMM, ECM and private data	Crossing and filtering	
PSI/SI and Data		
PSI/SI	Regeneration and edition tables anddescriptors through on line editor Tree structure view in XML format	

EIT	Pass through, regrouping, automaticremapping of TS ID, ON_ID and ServiceIDin the EITs from different ASI and IP inputs	
DVB Scrambling		
Scrambling mode	Simulcrypt, BISS-1, BISS-E	
Simulcrypt number per TS	Maximum 4	
Processing capability	<54Mb/s per TS	
EMM	Protocol TCP or UDP; Maximum bandwidth 8Mb/s	
ECM	Protocol TCP; Maximum bandwidth 3.8 Mb/s	
Control & Monitoring		
Connector Type	RJ-45, 10/100 Base-T	
Local Control	LED*4 and LCDdisplay	
Remote Control	HTTP Web, SNMP future extension	
Equipment Upgrade	HTTP web page	
Racks		
Model and Type	DMM-1100MF for 4RU; DMM-210MF for 1RU	
Number of Slot	8 slots for 4RU rack, 2 slots for 1RU rack	
Dimension	Width=483mm, Height=177mm, Depth=388mm for 4RU Width=483mm, Height=44mm, Depth=388mm for 1RU	
Cooling	By air with automatic temperature detection	
Power Supply	AC 100V-260V, 50-60Hz	
Physicals		
Dimension	381mm×111mm×32mm	
Weight	0.335Kg Net	
Power Supply	DC 5V, 5A	
Power Consumption	25W	
Temperature	Operating 0~45°C; Storage -10~60°C	
Operating Humidity	10~90%, non-condensed	

Block Diagram

