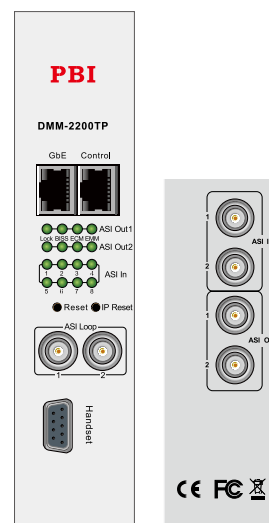**PBI** digital horizon

DMM-2200TP
Dual Channel DVB Scrambler

DMM-2200TP is a professional broadcast level Twin DVB-TS Scrambler module,which can support 2 TS streams scrambling with one signal unit. Each ASI Out ports can output independent scrambled TS streams or transparent loop through input TS stream out. It can support up to four different Simulcrypt scramble or BISS 1/E scramble by using the DVB common scrambling algorithm and built-in CW generator. With its high performance and stability, DMM-2200TP can be widely used in current or new-style DVB-S/T/C digital TV headend system.

Features

• Fully compliant with IOS13818 and EN300 468 standard
• Support MPEG2/H.264 TS stream scrambling
• Support BISS 1/E, Simulcrypt scrambling
• 2*ASI for SPTS/MPTS input, up to 213Mbps for each ASI.
• 2*ASI for independent MPTS output, up to 52Mbps for each scrambled TS.
• Can process maximum 48 EMM and ECM for each scramble tunnel
• Support most major CAS in market
• Support local or remote CAS synchronous simulcrypt processing
• Support error alarm of TS level
• Support statistics of PID and service bit rate
• Support PSI/SI insertion or re-generation
• IP GbE interface with up to 860Mbps input/output (transparent TS)
• Large cache with powerful output buffer against burst overflow
• Web remote management and SNMP supervision

Order Information

Interface	Model	DMM-2200TP
ASI Input		×2
ASI Scrambling Output		×2
ASI Loop-through Output		×2
Re-Multiplexing		●
Scrambling		●
TS/IP Interface(GbE)		×1
Ethernet Interface		×1
RS-232		×1

Specification

TS over IP	
Connector Type	
Connector Type	1×RJ45, 1000Base-T full duplex, IEEE803.2
Protocol	IPv4, IGMPv2/V3, UDP, RTP
Transport type	Multicast
IP Stream type	SPTS/MPTS
IP Jitter	200ms
Input/Output Bit Rate	≤860Mb/s
ASI Input/Output	
Connector Type	2×BNC female, 75Ω for Input 2× BNC female, 75Ω for Scrambling Output 2×BNC female, 75Ω for Loop Though Output
Standard	DVB-ASI, EN50083-9
Receiving Sensitivity	≤200mV
Input Voltage	200~880mV
Output voltage	800±80mV
Rising Time	≤1200ps
Falling Time	≤1200ps

Deterministic Jitter(peak)	≤10%
Random Jitter(peak)	≤8%
Return Loss	15dB
Data Format	Byte / Burst / Auto
Packet Length	188(byte) / 204(burst) / Auto
Input Bit Rate	≤213Mbps/per port (transparent TS)
Output Bit Rate	≤213Mbps/per port (transparent TS) ≤213Mbps/per port (scrambled TS)
Input/Output Service Quantity	256 PIDs/32 services
TS Scrambling	
Scrambling Algorithm	DVB common scrambling algorithm, built-in CW generator
Scrambling Mode	Simulcrypt, BISS 1/E
Control & Monitoring	
Connector Type	1×RJ-45, 10/100 Base-T, for equipment IP Control
Remote Control	SNMP, HTTP (Web Interface)
Front Panel Operation	LCD Display, Buttons control