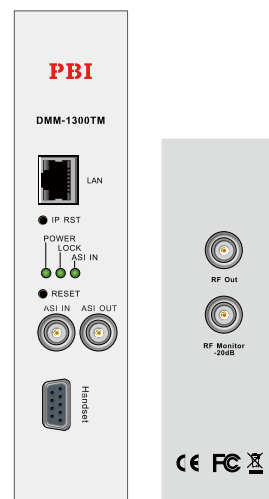


Digital TV Modulator and Trans-Modulator

DMM-1300TM Series Single Channel Transmodulator

- DVB-S2/S, DVB-C or DVB-T Tuner Input
- ASI input and output
- Flexible re-multiplexing between ASI and Tuner inputs
- PSI/SI adapting and re-generation, including NIT insertion, LCN insertion etc.
- Service Drop or PID filtering and Re-mapping
- Remote Control and Supervision by SNMP, HTTP WEB and Proprietary HDMS software
- On Site software update through IP
- RSSI, received Eb/No & BER monitoring



Specification

Tuner Input		TS Input Management	Remux and demux between Tuner and ASI Inputs
DVB-S/S2 Tuner Input		Service and PID management	Remux, filtering and remapping
Connector Type	1×F type female 75Ω for Input, 1×F type female 75Ω for loop through output	PSI/SI	PSI/SI table regeneration, NIT and SDT edition, LCN Edition and Re-generation
Input Frequency Range	950~2150MHz	ASI Output	
Input Level	-25~-65dBm	Connector Type	1×BNC Female, 75Ω
Symbol Rate	DVB-S QPSK: 5~45MS/s; DVB-S2 8PSK 10~31MS/s	Standard	DVB-ASI, EN50083-9
Roll-off Factor	DVB-S QPSK: 0.35; DVB-S2 8PSK: 0.35, 0.25, 0.2	TS Processing	2 mirror TS Re-multiplexing from Tuner and ASI inputs
Punctured Rates	DVB-S2 8PSK: 2/3, 3/4, 3/5, 5/6, 8/9, 9/10 DVB-S QPSK: 1/2, 2/3, 3/4, 5/6, 6/7, 7/8	DVB-C Re-Modulation	
LNB Polarization	0, 13V, 18V selectable	Constellation	J.83 Annex A: 16/32/64/128/256QAM; J.83 Annex B: 64/256QAM
LNB Band Switching Tone	0/22KHz selectable	Symbol Rate	3~7.2MS/s
DVB-C Tuner Input		I/Q Amplitude Error	< 0.3%
Connector Type	1×F type female 75Ω for Input, 1×F type female 75Ω for loop through output	I/Q Phase Error	< 0.3°
Input Frequency Range	48~860MHz	Phase jitter	< 0.5°RMS
Symbol Rate	1~7MS/s (ITU J.83 Annex A)	MER	> 35dB
Constellation	64/128/256 QAM	DVB-T Re-Modulation	
Input Level	-15~15dBmV	Constellation	QPSK/16QAM/64QAM
Bandwidth	6/7/8MHz	Bandwidth	5/6/7/8MHz
Input Return Loss	7dB (typ.)	FFT Mode	2K
DVB-T Tuner Input		Guard Interval	1/4, 1/8, 1/16, 1/32
Connector Type	1×F type female 75Ω for Input, 1×F type female 75Ω for loop through output	Code Rate	1/2, 2/3, 3/4, 5/6, 7/8
Input Frequency Range	174~230MHz (VHF); 470~860MHz (UHF)	MER	>36dB
Input Level	-20~-70dBm	RF Output	
Constellation	QPSK, 16-QAM, 64-QAM	Connector Type	F type female, 75Ω
Carrier Bandwidth	6/7/8 MHz	Output Frequency Range	48~860MHz agile, step by 10 KHz
FTT Mode	2K/8K	Output Level	97~110dBμV, step by 1dBμV
Guard Interval	1/4, 1/8, 1/16, 1/32	Spurious Rejection	55dB (typ.)
FEC Code Rate	1/2, 2/3, 3/4, 5/6, 7/8	Output Return Loss	12dB (typ.)
ASI Input		Control & Monitoring	
Connector Type	1×BNC Female, 75Ω	Connector Type	1×RJ45, 10/100M, for equipment IP Control
Standard	DVB-ASI, EN50083-9	Remote Control	SNMP, HTTP Web, Proprietary HDMS Network System Management Software
Input Bit Rate	≤ 100Mb/s	Local Control	Handheld Programmer Unit
Package Length	188 or 204 Bytes	Software Upgrade	FTP loader
TS Processing			

Order Information

Interface	Model	DMM-XXXX-XX							
		1300TM-S2C	1300TM-CC	1300TM-TC	1300TM-AC	1300TM-S2T	1300TM-CT	1300TM-TT	1300TM-AT
Tuner		-S2/S	-C	-T		-S2/S	-C	-T	
ASI Input									
Built-in Re-mux									
ASI Output									
QAM Modulation									
COFDM Modulation									

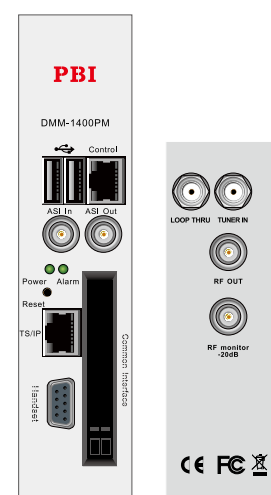
DMM-1400PM Series

Professional IRD and Trans-modulator Module

DMM-1400PM is a professional IRD and trans-modulator products, which combine IRD and modulator into one module. It can receive signal from multiple sources such as DVB-S2/S/C/T/T2, de-modulate to TS stream, descramble with CAM card, then modulate to DVB-C QAM RF signal or DVB-T COFDM or DVB-T2 or DTMB RF signal. With its GbE full duplex IP interface, it also support TS over IP input/output function. With its high performance and stability, DMM-1400PM is your best choice for various broadcast system or SMATV system.

Main features

- Multiple inputs DVB-S2/S/C/T/T2, TS/IP, and ASI optional
- DVB-C QAM or DVB-T COFDM or DVB-T2 or DTMB RF modulation output
- Supports 2K/4K/8K FFT Mode for DVB-T COFDM modulation
- GbE UDP/RTP, Unicast/Multicast, and SPTS/MPTS over IP(full duplex)
- Flexible re-multiplexing among Tuner, ASI and TS/IP inputs
- PSI/SI adapting and re-generation, including NIT, LCN insertion etc.
- Service Drop or PID filtering and Re-mapping
- 2 x DVB-CI slots, Multiple TV program decryption
- Remote Control and supervision by SNMP, HTTP WEB
- RSSI, received Eb/No & BER monitoring
- On Site software update through IP or USB



Specification

Tuner Input		Constellation	16/32/64/128/256QAM
DVB-S/S2 Tuner Input		Bandwidth	6MHz/7MHz/8MHz
Connector Type	1×F type female 75Ω for Input, 1×F type female 75Ω for loop through output	Input Return Loss	7dB(typ.)
Input Frequency Range	950~2150MHz	DVB-T Tuner Input	
Input Level	-25~-65dBm	Connector Type	1×F type female 75Ω for Input, 1×F type female 75Ω for loop through output
Roll-off Factor	DVB-S: 0.35 DVB-S2: 0.2, 0.25, 0.35	Input Frequency Range	174~230MHz(VHF); 470~860MHz(UHF)
FEC Code Rate	DVB-S QPSK: 1/2, 2/3, 3/4, 5/6, 7/8 DVB-S2 QPSK: 1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10 DVB-S2 8PSK: 3/5, 2/3, 3/4, 5/6, 8/9, 9/10	Input Level	-20~-70dBm
LNB Polarity Selection Voltage	0, 13V, 18V selectable	Modulation	QPSK, 16-QAM, 64-QAM
LNB Band Selection Tone	0/22KHz selectable	Carrier Bandwidth	6/7/8 MHz
Satellite Selection Command	DiSEqC 1.0	FTT Mode	2K/8K
DVB-C Tuner Input		Guard Interval	1/4, 1/8, 1/16, 1/32
Connector Type	1×F type female 75Ω for Input, 1×F type female 75Ω for loop through output	Viterb Error Correction Code Rate	1/2, 2/3, 3/4, 5/6, 7/8
Input Frequency Range	48~862MHz	ASI Input	
Input Level	45~75dBμV	Connector Type	1×BNC female, 75Ω
Symbol Rate	1~7MBaud(ITU J.83 Annex A)	Standard	DVB-ASI, EN50083-9
		Input Bit Rate	≤ 100Mb/s
		Package Length	188 or 204 Bytes
		TS over IP	
		Connector Type	1 x RJ-45, 1000 Base-T