



ASI COFDM Modulator

MR9300TM

DATASHEET

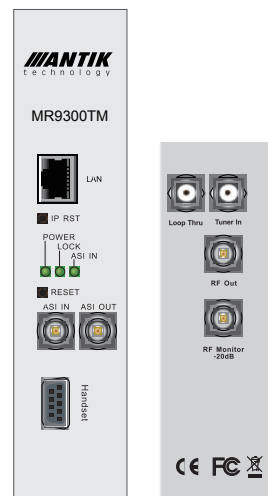
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Digital TV Modulator and Trans-Modulator

MR9300TM 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	
DVB-S/S2 Tuner Input	
Connector Type	1×F type female 75Ω for Input, 1×F type female 75Ω for loop through output
Input Frequency Range	950~2150MHz
Input Level	-25~-65dBm
Symbol Rate	DVB-S QPSK: 5~45MS/s; DVB-S2 8PSK 10~31MS/s
Roll-off Factor	DVB-S QPSK: 0.35; DVB-S2 8PSK: 0.35, 0.25, 0.2
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
LNB Polarization	0, 13V, 18V selectable
LNB Band Switching Tone	0/22KHz selectable
DVB-C Tuner Input	
Connector Type	1×F type female 75Ω for Input, 1×F type female 75Ω for loop through output
Input Frequency Range	48~860MHz
Symbol Rate	1~7MS/s (ITU J.83 Annex A)
Constellation	64/128/256 QAM
Input Level	-15~15dBmV
Bandwidth	6/7/8MHz
Input Return Loss	7dB (typ.)
DVB-T Tuner Input	
Connector Type	1×F type female 75Ω for Input, 1×F type female 75Ω for loop through output
Input Frequency Range	174~230MHz (VHF); 470~860MHz (UHF)
Input Level	-20~-70dBm
Constellation	QPSK, 16-QAM, 64-QAM
Carrier Bandwidth	6/7/8 MHz
FTT Mode	2K/8K
Guard Interval	1/4, 1/8, 1/16, 1/32
FEC Code Rate	1/2, 2/3, 3/4, 5/6, 7/8
ASI Input	
Connector Type	1×BNC Female, 75Ω
Standard	DVB-ASI, EN50083-9
Input Bit Rate	≤ 100Mb/s
Package Length	188 or 204 Bytes
TS Processing	

TS Input Management	Remux and demux between Tuner and ASI Inputs
Service and PID management	Remux, filtering and remapping
PSI/SI	PSI/SI table regeneration, NIT and SDT edition, LCN Edition and Re-generation
ASI Output	
Connector Type	1×BNC Female, 75Ω
Standard	DVB-ASI, EN50083-9
TS Processing	2 mirror TS Re-multiplexing from Tuner and ASI inputs
DVB-C Re-Modulation	
Constellation	J.83 Annex A: 16/32/64/128/256QAM; J.83 Annex B: 64/256QAM
Symbol Rate	3~7.2MS/s
I/Q Amplitude Error	< 0.3%
I/Q Phase Error	< 0.3°
Phase jitter	< 0.5°RMS
MER	> 35dB
DVB-T Re-Modulation	
Constellation	QPSK/16QAM/64QAM
Bandwidth	5/6/7/8MHz
FFT Mode	2K
Guard Interval	1/4, 1/8, 1/16, 1/32
Code Rate	1/2, 2/3, 3/4, 5/6, 7/8
MER	>36dB
RF Output	
Connector Type	F type female, 75Ω
Output Frequency Range	48~860MHz agile, step by 10 KHz
Output Level	97~110dBμV, step by 1dBμV
Spurious Rejection	55dB (typ.)
Output Return Loss	12dB (typ.)
Control & Monitoring	
Connector Type	1×RJ45, 10/100M, for equipment IP Control
Remote Control	SNMP, HTTP Web, Proprietary HDMS Network System Management Software
Local Control	Handheld Programmer Unit
Software Upgrade	FTP loader

Order Information

Interface	Model	MR9300							
		MR9300TM-S2C	MR9300TM-CC	MR9300TM-TC	MR9300TM-AC	MR9300TM-S2T	MR9300TM-CT	MR9300TM-TT	MR9300TM-AT
Tuner		-S2/S	-C	-T		-S2/S	-C	-T	
ASI Input		•	•	•	•	•	•	•	•
Built-in Re-mux		•	•	•	•	•	•	•	•
ASI Output		•	•	•	•	•	•	•	•
QAM Modulation		•	•	•	•				
COFDM Modulation						•	•	•	•