

DCH-3000TM

Digital DVB QAM Modulator

Headend System



The DCH-3000TM DVB QAM Modulator, which combines QPSK demodulator, DS3 adapter(optional), DVB TS PID Filter and digital cable QAM (DVB-C) modulator in a single unit. DCH-3000TM could receive QPSK, DS3 signal from HFC system, ASI and SPI (LVDS) input, and then transmodulates the input signal to digital QAM signal. Also DCH-3000TM supports 3 output modes, including DVB-ASI output, RF output and DS3 (optional) output. The streams coming from each input port can be re-multiplexed by the built-in re-multiplexer with PCR Error Correction function and DVB tables can be highly customized. The new generated stream can be delivered to modulator or output via ASI directly. User can take full control via the front panel or via HDMS (SNMP based network management software) remotely via LAN network.

Features

- Factory optional for DVB-S/-C/-T reception
- ITU-T J.83 Annex A and B compliant
- Output full frequency (48MHz~862MHz) agile output
- Support 16/32/64/128/256/64B/256B QAM
- RF output level 100~113dB μ V(adjustable), max.120dB μ V (optional for -20 series)
- Support PID re-mapping, TS filtering and mux
- Support PSI/SI edit, generating and insertion (optional for -30 series)
- Support PBI HDMS Network Management Software (SNMP based)
- User friendly operation interface through LCD monitor
- 1U, 19" standard rack installation

* Specifications are subject to change without notice *

DCH-3000TM-30S/20S QPSK Demodulation

Input frequency range	950~2150MHz
Input level	-25~-65dBm
Input impedance	75Ω
Connector	F-type
Symbol rate	2~45MBauds
Rolling off factor	0.35
Punctured rate	1/2, 2/3, 3/4, 5/6, 7/8
De-interleaving	I=12
LNB power supply	0, 13V, 18V selectable
0/22K	0/22KHz selectable

DCH-3000TM-30C/20C QAM Demodulation

Input frequency range	48~862MHz
Input level	45~90dBμV
Symbol rate	2~7.2MS/s
Connector	IEC female
Impedance	75Ω
Demodulation	16/32/64/128/256QA

DCH-3000TM-30T/20T COFDM Demodulation

Input frequency range	VHF: 174MHz~230MHz UHF: 470MHz~862MHz
Input level	-20~-91dBm
Impedance	75Ω
Connector	IEC Female
OFDM Spectrum	2K and 8K
Demodulation	QPSK/16QAM/64QAM
Guard interval	1/32, 1/16, 1/8, 1/4
FEC	1/2, 2/3, 3/4, 5/6, 6/7, 7/8

ASI Input

Connector	75Ω, BNC
Data mode	Byte and Burst
Packet length	188 or 204
Signal level	800mVpp±10%

SPI Input

Connector	25-pin sub-D female
Impedance	90~132Ω
Data rate	1M~54Mb/s

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Specifications

Packet length	188 or 204
Signal level	0.1~2.0Vpp
DS3 Input	
Connector	75Ω, BNC
Max. bit rate	44.736Mbps
Format	Unframed or framed Framing according to G.804/G.752 (DS3)
ASI Output	
Connector	75Ω, BNC
Max. bit rate	270Mb/s
ASI mode	Byte
Packet length	188 or 204
Signal level	800mVpp±10%
DS3 output	
Connector	75Ω, BNC
Max. output bit rate	44.736Mbps
Format	Unframed or framed Framing according to G.804/G.752 (DS3)
QAM Modulation and RF output	
Constellation	16/32/64/128/256/64B/256B QAM
Output symbol rate	2~7.2MS/s
I/Q amplitude imbalance	<0.1%
I/Q phase deviation	<0.1°
Phase jitter	<0.5°RMS
MER	>35dB
Output frequency	48~862MHz, min. step 10KHz
RF connector	75Ω, F-type
Max. output level	113 dBμV(for -30x), 120dBμV(for -20x only)
Harmonics and Spurious rejection	>55dB
Return loss	≥14dB
General	
Weight	5kg
Dimension	44mm×483mm×402mm
Operating temperature	0-45℃
Storage temperature	-20~70℃
Humidity	<95%
Power supply	AC90~260V, 50/60Hz
Power consumption	30W

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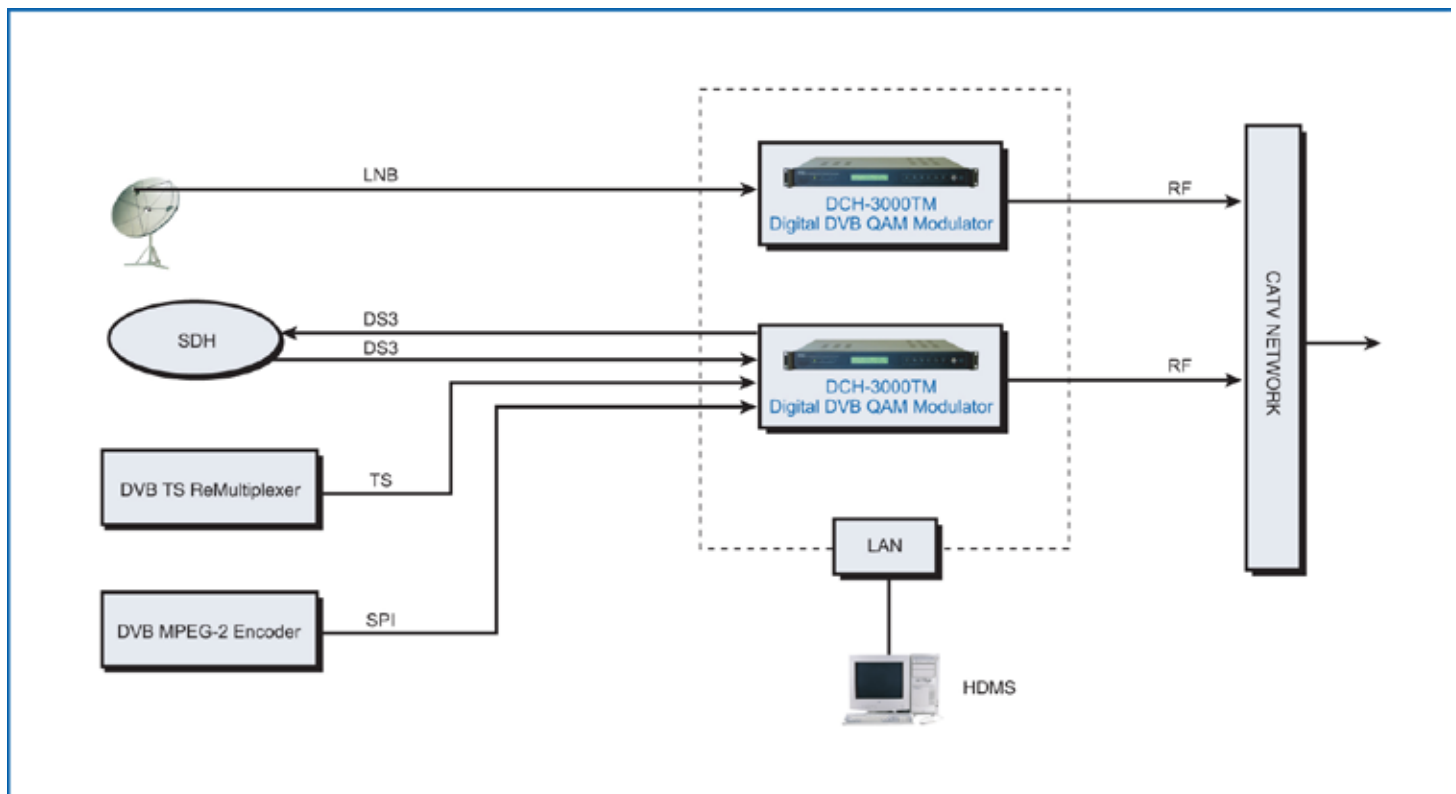
Specifications



Model List

function	DCH-3000TM-30S	DCH-3000TM-30C	DCH-3000TM-30T	DCH-3000TM-20S	DCH-3000TM-20C	DCH-3000TM-20T	DCH-3000TM-20A
	DVB-S	DVB-C	DVB-T	DVB-S	DVB-C	DVB-T	
ASI input	•	•	•				•
SPI input	•	•	•				
ASI output	•	•	•				
RF output	•	•	•	•	•	•	•
Ethernet	•	•	•	•	•	•	•

• standard option



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