

WQ-3650DS / WQ-3650E

Multifunction QAM Modulator

WADT WQ-3650DS/WQ-3650E can receive MPEG-2 transport streams from 8 ASI inputs and 2 E3/DS3 inputs (optional for WQ-3650E), and then multiplexing, scrambling and processing it with channel coding, finally output 4 channels of adjacent RF signals after QAM modulation, WQ-3650DS/WQ-3650E is our economical core product of digital cable TV head-end solutions. Users can get these functions upon their system needs and budgets by purchasing the update package from the suppliers.



Main Features:

- Support 8 ASI inputs, support CBR and VBR
- Support ITU-T J.83A/B/C, output frequency range: 30 MHz ~ 860 MHz
- Expandable up to four RF modulating output (WQ-3650DS optional)
- Support two E3/DS3 inputs and two ES/DS3 loop outputs (WQ-3650E optional)
- Support PID filtering, pass-through, PCR auto-correction
- 4 adjacent frequency output with output-channel selection switch
- 88/204 self-adaptive packet length with real-time input data format display
- Extremely large buffer design, support both burst & uniform input streams, and also support re-uniforming of the input data, in order to improve the output efficiency
- Modulated transport streams can be either directly passed through, multiplexed or scrambled
- NIT mapping & forwarding up to 45 frequencies
- 8 groups of PID filtering and re-mapping
- Support various customizable PSI/SI table extraction, resolving and modification
- Support SI table information replacement and insertion
- Self-adaptive filter circuit design ensures outstanding out-of-band rejection
- Centralized Web, SNMP(WQ-3650DS) management and remote upgrade/maintenance
- Support monitoring of operation temperature and power supply status

Technical Specifications:

Input	
ASI Input	8 x BNC
E3/DS3 Interface (GQ-3650E Optional)	2 x BNC for E3/DS3 input 2 x BNC for E3/DS3 loop out
Bit Rate	ASI input : 1.5~214Mbps each, maximum 400Mbps in total E3/DS3 input: 34.4Mbps/44.7Mbps
Modulation Output	
RF Output	2 x BNC (1 x BNC for -20dB test output port)
Expandable RF output (GQ-3650DS optional)	4 x RF output
Number of Output	4 carriers with maximum 32 of TS program output
Symbol Rate	4.2~7Mbaud/s
Output Bandwidth	4.83~8.05 MHz
RF Frequency	30~860 MHz
Output EPL	95 dBuV~110 dBuV
Gain Fine-tune	-2.5~10.5dB, Step Size 0.25dB
Channel Coding	Comply with ITU-T J.83 Annex A/B/C
Constellation	16/32/64/128/256QAM (Annex A) 64/256QAM(Annex B)
Multiplexing and Scrambling	
Multiplexing	Auto-generation/manual insertion of PSI/SI table

	Support intelligent program search
	Support scrambling at program-level
Scrambling	Up to 52 Mbps TS scrambling rate each channel
	Up to 4 simul-crypt CAS
EMM Bandwidth	Up to 3 Mbps
Scrambling Capability	Maximum 128
Network Management	
Connector	1 x RJ-45
Interface	10/100M Base-T Ethernet
Network Management Protocol	WQ-3650E: HTTP (Web) WQ-3650DS: HTTP/SNMP
Power Supply	
Input Voltage	85~260VAC, 50/60Hz
Typical Consumption	<20W
Environmental	
Operating Temperature	5°C~45°C
Storage Temperature	-25°C~85°C
Operating Humidity	10%~90%
Mechanical	
Dimension (W x H x D)	483mm x 44mm x 300mm
Weight	<5Kg

Typical Application:

