

# AQD

## ATSC/QAM Demodulator 1x 8VSB/QAM ► 1x AV/2x ASI

AQD (ATSC/QAM Demodulator) accepts one input in 8VSB (digital off-air) or QAM (digital cable) format, and delivers one output in NTSC composite analog Audio/Video format, and two identical outputs in ASI format.

AQD allows delivering of a digital off-air program to viewers with an analog TV set. It also allows an operator to cherry-pick channels from a "clear" QAM cable lineup.

AQD PLUS is the same as AQD, but includes the AFD broadcast package. AFD (Active Format Description) is a standard set of codes embedded in the video stream and used by digital television broadcasters to optimally display a 16:9 video format on an analog television set designed for 4:3 video format.



### Features

- Input standards supported are digital off-air (8VSB) and digital cable (QAM 64 and 256)
- NTSC Composite Analog Audio/Video output is in 480i format and supports Closed Captioning (EIA-608)
- Optional AQD-RCS module allows remote monitoring and configuration of up to 80 AQD modules
- Optional AQD-SPS unit provides standby utility power to the primary power supply (AQD Power & Control module)

### Ordering Information

Model	Stock #	Description
AQD	6245	ATSC/QAM Demodulator
AQD PLUS	6244	AQD with AFD Broadcast Package
AQD PLUS ASI	6244-10	AQD PLUS with 2xASI outputs
AQD-PCM	6246	AQD Power & Control Module
QTRC	6233	QAM Transcoder Rack Chassis

### Options

AQD-RCS	2730	AQD Remote Configuration Server Module
AQD/AQT-SPS	6253	AQD/AQT Standby Power Supply
QTHF	6235	QT Headend Fan



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**Specifications**

**INPUT**

<b>Connector:</b>	"F" Female
<b>Standards</b>	<b>8VSB:</b> ATSC Digital Television Standard A/53E <b>QAM:</b> ITU-T J.83 (64 and 256 QAM)
<b>8VSB Mode</b>	<b>Tuning Range:</b> UHF (NTSC Ch. 14-78), VHF (NTSC Ch. 2-13) <b>Symbol Rate:</b> 10.762 Msymbols/sec <b>Bandwidth:</b> 6 MHz
<b>QAM Mode</b>	<b>Tuning Range:</b> CATV (NTSC Ch. 2-135) <b>Symbol Rate:</b> 5.3606 Msymbols/sec (QAM 256); 5.057 Msymbols/sec (QAM 64) – Auto Detect <b>Bandwidth:</b> 6 MHz
<b>8VSB Power Level:</b>	-20 to +20 dBmV
<b>QAM Power Level:</b>	-20 to +20 dBmV
<b>Impedance:</b>	75 Ω

**OUTPUT**

<b>Connector</b>	<b>Video:</b> "F" Female <b>Audio:</b> RCA; Left & Right
<b>NTSC Composite Video</b>	<b>Level:</b> 1 Volt Peak-to-Peak <b>Flatness:</b> 1.0 dB p/v (30 Hz to 4.2 MHz) <b>Video to Noise Ratio:</b> 70 dB <b>Differential Gain:</b> ± 1.0% <b>Differential Phase:</b> ± 1.0 degree <b>Format:</b> 480i <b>Aspect Ratio:</b> Center Cut, Letterbox, Full, Zoom 1, Zoom 2 <b>Closed Captioning:</b> EIA-608
<b>L/R Analog Audio</b>	<b>Level:</b> 1.0 to 1.2 Volt Peak-to-Peak (at -20 dBFs input) <b>Frequency Response:</b> 2.0 dB p/v (30 Hz to 20 KHz) <b>Modes:</b> Stereo, Mono, SAP
<b>ASI Output (AQD PLUS ASI ONLY)</b>	<b>Standard:</b> DVB-ASI; 50083-9 <b>No. of Streams:</b> Two identical streams <b>Data Bit Rate:</b> 270 Mbps <b>Transport Stream Rate:</b> 160 Mbps (Max)

**GENERAL**

<b>Dimensions (W x D x H)</b>	<b>AQD/AQD-RCS Module:</b> 1.5 x 11.31 x 5.25 inches (38 x 287 x 133 mm) <b>AQD-PCM Module:</b> 4.5 x 10.625 x 5.25 inches (114 x 270 x 133 mm) <b>QTRC Chassis:</b> 19 x 12.0 x 5.25 inches (483 x 305 x 133 mm)
<b>Power:</b>	110 VAC/60 Hz (Fuse:1 A, 250 VDC, SloBlo)
<b>Power Dissipation:</b>	10 W (per AQD module)
<b>Weight</b>	<b>AQD/AQD-RCS Module:</b> 1.5 lbs (0.68 kg) <b>Fully Loaded Chassis:</b> 24 lbs (10.9 kg)
<b>Operating Temperature:</b>	32 to 122 °F (0 to 50 °C)
<b>Storage Temperature:</b>	-13 to 158 °F (-25 to 70 °C)
<b>Operating Humidity:</b>	0 to 95% RH @ 35 °C max, non-condensation
<b>Storage Humidity:</b>	0 to 95% RH @ 35 °C max, non-condensation

**ALARMS / MONITORING / CONTROL**

<b>Indicators</b>	<b>AQD Module:</b> Lock (Green LED) <b>AQD-RCS Module:</b> Link/Transmit/Receive (3 x Green LEDs)
<b>Local Monitoring:</b>	Front-panel 16-character, 2-line LCD screen
<b>Local Control:</b>	Front-panel Navigational Key-pad
<b>Remote Monitoring/Control:</b>	GUI-based menu via Web browser (Available if the optional AQD-RCS module is installed)