



**BLONDER
TONGUE**
LABORATORIES, INC.

AQD

ATSC/QAM DEMODULATOR

1x 8VSB/QAM ► 1x AV/2x ASI

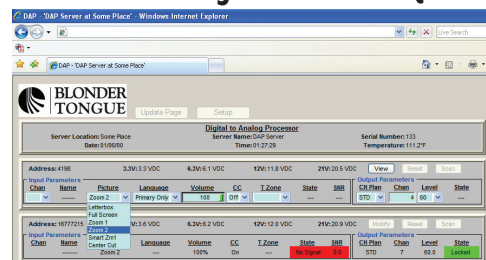
AQD (ATSC/QAM Demodulator) accepts one input in 8VSB (digital off-air) or QAM (digital cable) format, and delivers one output in NTSC composite analog Audio/Video format, and two identical outputs in ASI format.

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.



Remote Monitoring & Control via AQD-RCS



8VSB OR QAM



**Composite
Analog A/V**

2 x ASI
(AQD PLUS ASI only)

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



SPECIFICATIONS

INPUT

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

OUTPUT

Connector Video: Audio:	"F" Female RCA; Left & Right
NTSC Composite Video Level: Flatness: Video to Noise Ratio: Differential Gain: Differential Phase: Format: Aspect Ratio: Closed Captioning:	1 Volt Peak-to-Peak 1.0 dB p/v (30 Hz to 4.2 MHz) 70 dB $\pm 1.0\%$ ± 1.0 degree 480i Center Cut, Letterbox, Full, Zoom 1, Zoom 2 EIA-608
L/R Analog Audio Level: Frequency Response: Modes:	1.0 to 1.2 Volt Peak-to-Peak (at -20 dBfs input) 2.0 dB p/v (30 Hz to 20 KHz) Stereo, Mono, SAP
ASI Output (AQD PLUS ASI ONLY) Standard: No. of Streams: Data Bit Rate: Transport Stream Rate: Output Impedance:	DVB-ASI; 50083-9 Two identical streams 270 Mbps 160 Mbps (Max) 75 Ω

GENERAL

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

ALARMS/MONITORING/CONTROL

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

RELATED PRODUCTS

Model	Description
AQM	ASI-to-QAM Modulator; Six modulators in 2RU
AQT	8VSB/QAM-to-QAM Transcoder; Eight transcoders in 3RU
DQMx	4x1 ASI and 8VSB/QAM-to-QAM Multiplexer; 1RU