

# Channel Catcher 8VSB+QAM™

**Broadcast Quality, Multi Channel, Frequency Agile, 2 RU 8VSB or QAM (Combination) Tuner/Demodulator with DVB-ASI Output. Ideal for Digital Turnaround at Cable Head Ends, by Feeding the ASI Outputs into Modulators for Transmodulation. These Modules are also Suitable for Remote Receivers Where the Outputs are Encapsulated into IP.**



a-t-s-c  
Advanced Television Systems Committee

## Features

- One to eight receiver modules fit snugly into 2 RU chassis
- Single demodulator ships with power supply and chassis
- Optional additional modules can be factory or field installed
- Tunes to RF center frequency with thumb wheel switch
- 8VSB, 16VSB, 64QAM, 256QAM support (ITU-T J.83 Annex B)
- Tunes frequencies from 55 to 860 MHz
  - VHF Channels 2-13
  - UHF Channels 14-69
  - Cable Channels 2-134
- Dual DVB-ASI outputs
- SMPTE-310M output mode available
- Output disable mode available on no lock
- Fault relay contact available
- Front panel controls with direct entry switches
- Front panel LED display with status and fault indicators
- Signal-to-noise ratio display in 3dB step LED bar display

## Applications

- “Cherry picking” channel line ups for cable system operators
- QAM or 8VSB signal regeneration
- Schools and universities with cable systems
- Hotels and cruise ships
- “Content grooming” or “cherry picking” via a TS mux

## Overview

8VSB is the modulation standard for American over the air broadcast. QAM is the modulation standard for American cable television. The Channel Catcher is a high density receiver that complies with both standards. The off air multichannel demodulator receives either 8VSB or QAM signals and outputs the demodulated transport streams for digital turnaround applications.

The Channel Catcher demodulates one to eight separate 8VSB or QAM signals, depending on the number of compact demodulators loaded into the 2 RU unit, and converts them to DVB-ASI. The standard system consists of a single demodulator, power supply, and 2 RU chassis. Add up to seven optional demodulators to create a space-saving solution for broadcast facilities. (A second power supply is required for five or more demodulators.)

Each Channel Catcher 8VSB+QAM™ module is a frequency agile Broadcast Quality demodulator and is particularly designed to not alter the incoming signal in any way. With 8VSB demodulation the entire 19.3 Mbps multi-program transport stream is forwarded at the DVB-ASI output. With QAM demodulation 38 Mbps is available at the ASI port. The DVB-ASI output can be fed to either a multichannel transcoder or scaler having DVB-ASI inputs, or to a multichannel QAM modulator for insertion into local cable feeds. Another application is “content grooming” or “cherry picking” via a TS mux.

Each receiver can be easily set up via a front panel with direct entry switches. The front panel provides visual feedback about the incoming signal quality for each demodulator, including the center frequency and SNR and Lock status.

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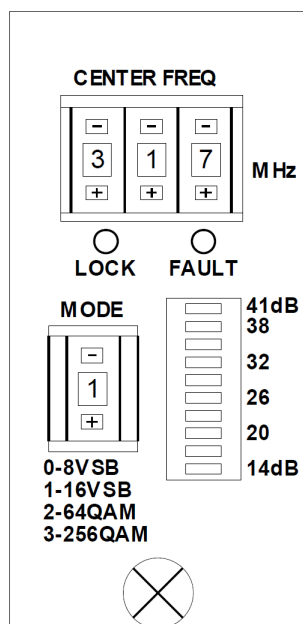
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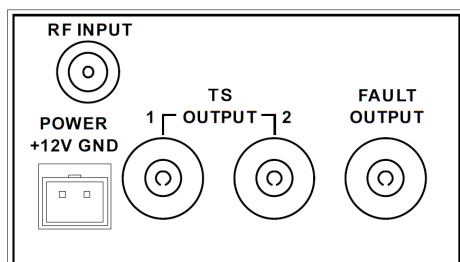
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# Channel Catcher 8VSB+QAM™ Tuner/Demodulator

## Front View



## Input/Output



## Product Views



## Ordering Info

Channel Catcher 8VSB+QAM

– includes power supply and 2 RU rack

Additional Channel Catcher 8VSB+QAM modules: ACC

Additional power supply (required for 5+ modules): APS4CC

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## Specifications

### RF Input

Connector:	75 ohm BNC
Tunes frequencies from 55 to 860 MHz:	VHF Channels 2-13 UHF Channels 14-69 Cable Channels 2-134
Frequency Step:	1 MHz step

### RF Input Levels

8VSB:	-80dBm ~ -5dBm
16VSB/QAM:	-62dBm~-32dBm

### DVB-ASI Output

DVB-ASI bitrate:	270 Mbps
Voltage Level:	800 mV p-p ±10%
D.C. Offset:	±0.5 VDC
Rise Time:	<1.2 ns (20% to 80%)
DVB-ASI Connector:	75 ohm BNC

### Fault Relay Contact

Notification of:	Loss of Power Data Link Integrity Carrier Unlock, by Demod
Relay Contact Closure:	0.5 A @ 24VDC
Absolute maximum current:	1.0 A

### LEDs

Signal:	Lock LED and Fault LED
Bar Graph:	SNR display in 3dB step

### Modulation Mode Switch

0	8VSB, ASI output
1	16VSB, ASI output
2	64QAM, ASI output
3	256QAM, ASI output
4	8VSB, ASI disable on unlock
5	16VSB, ASI disable on unlock
6	64QAM, ASI disable on unlock
7	256QAM, ASI disable on unlock
8	8VSB, SMPTE-310M output
9	8VSB, SMPTE-310M out, disable on unlock

### Physical

Dimensions:	HxWxL: 3.5 x 19 x 10.2 inches 8.9 x 48.3 x 26 cm
Weight:	8.81 lbs. (4.0 kg)
Power Input:	100-240 VAC, 50/60 Hz
Power Consumption:	30 VA, maximum
Operating Temperature:	32 to 113°F (0~45°C)
Storage Temperature:	-40° to 65°C
Humidity:	90% maximum (non-condensing)
Conformities	FCC, RoHS, CE Mark



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