



Blonder Tongue

FlexCoder

FLEXIBLE TRANSCODER

IP/ASI/RF Option to IP/ASI/QAM

SOLUTIONS FOR ALL YOUR APPLICATIONS

The **FlexCoder** is a versatile solution that combines edge QAM, off-air transcoding, and IP grooming technology into one integrated package. The unit can convert ASI to IP video streams as well as Mux and Demux ASI and IP streams. An RF input option is available for transcoding 8VSB (digital off-air) to clear QAM, ASI or IP signals. By providing a wide-range of functionality in a compact solution, the FlexCoder brings remarkable cost savings.

The FlexCoder is an ideal solution for video labs and campus environments when you need to provide a custom channel line-up for in-house distribution.



Features

- De-multiplexes MPTS to SPTS; MPEG-2 or H.264/H.265
- Multiplexes SPTS to MPTS via IP and/or QAM outputs; MPEG-2 or H.264/H.265
- Optional 8VSB/QAM input board to receive one (1) off-air or clear QAM channel.
- Can pass through or modify PSIP information such as major/minor channels, short names and corresponding program IDs (PIDs)
- Allows for null packet insertions or deletion supporting Constant Bit Rate (CBR)
- UDP Unicast or Multicast support
- Supports UDP delivery of IP packets
- Separate Web-based management port for local and remote control
- Supports three audio formats: AC3, AAC and MPEG-1 Layer 2, E-AC3

Ordering Information

Model	Stock #	Description
FlexCoder	6582	Flexible Transcoder
	6582-RFI	FlexCoder with RF Input Option

See reverse side for modes of operation table.

Made in U.S.A.

Rev: 062916

Blonder Tongue is ISO 9001:2008 Certified

Specifications

Input

IP Mode	Connectors: 1x RJ-45 Standard: 1000Base-T Ethernet (GigE) UDP/RTP: Supported (user-selectable) Protocols: IGMPv2/IGMPv3 Supported
Stream Portfolio	SPTS and MPTS: Supported Muxing: 32 SPTS to 4 MPTS Bit Rate: Constant
ASI	Connector: 4x BNC Female Standard: DVB-ASI; EN 50083-9
8VSB Mode*	Connectors: 1x "F" Female Standard: ATSC Digital Television A/53E Tuning Range: UHF (Ch.14-69), VHF (Ch.2-13) Data Rate: 19.392 MHz Bandwidth: 6 MHz Power Level: -20 to +20 dBmV Impedance: 75 Ω
QAM Mode*	Connectors: 1x "F" Female Standard: ITU-T J.83; Annex A and B (64 and 256 QAM) Tuning Range: CATV Ch. 2-158 (STD, HRC, IRC) Data Range: 38.8 Mbps (QAM 256); 26.97 Mbps (QAM 64) — Auto Detect Bandwidth: 6 MHz Power Level: -15 to +20 dBmV (@ QAM 256) Impedance: -20 to +20 dBmV (@ QAM 64) 75 Ω

* Optional

Output

QAM	No. of Output Modules: 1x Quad-QAM (total of 4 QAM channels) Connector: 1x "F" Female (for combined output) Modulation: QAM 16, 32, 64, 128, and 256 Standards: ITU-T J.83; Annex A and B DVB Symbol Rate: Variable; up to 7 MSymbol/sec (MBaud) Frequency Range: 54 to 1002 MHz Tuning: CATV Channel Selectable (Ch. 2 to 158) RF Level: +40 dBmV (±1 dB increment) RF Level Adjustment Range: +35 to +42 dBmV (±1 dB increment) Frequency Tolerance: ± 0.5 kHz @ 77 °F (25 °C) Frequency Stability: ± 5 kHz over 32 to 122 °F (0 to 50 °C) Amplitude Flatness: ± 0.25 dB (over 6 MHz channel) Phase Noise: -98 dBc (@ 10 kHz) Spurious: -60 dBc Broadband Noise: -70 dBc (@ +40 dBmV output level, 5.5 MHz bandwidth) Impedance: 75 Ω Spectral Inversion: Auto Recognition Carrier Suppression: 45 dB Return Loss: 14 dB typical Signal-to-Noise Ratio (SNR): 40 dB typical MER: 39 dB typical I/Q Phase Error: Less than 1 degree I/Q Amplitude Imbalance: Less than 1%
IP	Connectors: 1x RJ45 Standard: 1000Base-T Ethernet (GigE) UDP/RTP: Supported (user-selectable) Address Assignment: IPv4 addresses & port numbers (user-selectable)
ASI	Connector: 1x BNC Female Standard: DVB-ASI; EN 50083-9

General

Dimensions (W x D x H):	8.69 x 12.70 x 1.97 inches (220.7 x 322.6 x 50.0 mm)
Power:	12 VDC External Power Supply
Power Dissipation:	20 W
Weight:	3.0 lbs (1.36 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-condensing
Storage Humidity:	0 to 95% RH @ 35 °C max, non-condensing

Alarms/Monitoring/Control

Local Monitoring:	1x Power LED 1x Status LED
Local Control:	1x IP Reset button
Remote Monitoring/Control:	GUI-based menu via Web browser (1x RJ45; 10/100Base-T)

Modes of Operation

Mode	Input	Functions and Notes	Output TS Select
1 PASS-THRU	(RJ45) GigE Full Duplex ⁽¹⁾ ; 4xMPTS (16 prog./3 audio each max) (BNC) 4xASI	<ul style="list-style-type: none"> May select up to four (4) input sources to present four (4) transport streams (TS) over QAM and/or IP. Limited PSIP Manipulation, e.g. Re-PID Capability May direct any one (1) of the TS to the ASI output (5th Output) 	^(2,3) 4xQAM (16 prog. each max) ^(2,3) 4xMPTS (16 prog. each max) 1xASI (214 Mbps)
2 DEMUX	(RJ45) GigE Full Duplex ⁽¹⁾ ; 4xMPTS (16 prog./3 audio each max) (BNC) 4xASI	<ul style="list-style-type: none"> Defines 32xSPTS max Full PSIP Manipulation and Program Filtering Capability 	32xSPTS; 40 Mbps max each
3 MUX	(RJ45) GigE Full Duplex ⁽¹⁾ • 32xSPTS (3 audio each max); or • 4xMPTS (16 prog./3 audio each max) (BNC) 4xASI	<ul style="list-style-type: none"> A total of 32 TS inputs can be multiplexed over a total of four (4) TS in any combination on QAM and IP. Full PSIP Manipulation and Program Filtering Capability May direct any of the output TS to the ASI output (5th Output) 	^(2,3) 4xMPTS ^(2,3) 4xQAM 1xASI

⁽¹⁾ Sum of input data and output data must not exceed 1 Gbps.

⁽²⁾ MPTS and QAM output TS quantity cannot exceed four (4).

⁽³⁾ Once defined, a TS may be selected for presentation on either QAM or IP, or both.