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Blonder Tongue

The **FlexCoder** combines edge QAM, off-air transcoding, and IP grooming technology into one integrated package. By providing a wide-range of functionality in a compact solution, the FlexCoder brings remarkable cost savings. The unit can convert ASI to IP video streams, as well as Mux and Demux ASI and IP streams.

IP Streams
(32xSPTS/4xMPTS)

4xASI

1xASI   **4xQAM**   **IP Streams**
Adjacent   (32xSPTS/4xMPTS)
(1xRF)

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
- Can pass-thru 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
FlexCoder-RP-2	6591	Rack Panel for 2 FlexCoders across 1RU

See next page for modes of operation table.

Made in U.S.A.

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Specifications

Input

IP Mode

Connectors:	1x RJ-45
Standard:	1000Base-T Ethernet (GigE)
UDP/RTP:	Supported (user-selectable)
Protocols:	IGMPv2/IGMPv3 Supported

Stream Portfolio

Standard:	ISO/IEC 13818-1
TS Packet Length:	188 bytes
Sync Byte:	0x47
SPTS and MPTS:	Supported
Muxing:	32 SPTS to 4 MPTS
Bit Rate:	Constant

ASI

Connector:	4x BNC Female
Standard:	DVB-ASI; EN 50083-9

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)
Channels' Bandwidth:	24 MHz (4x Adjacent 6 MHz)
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: **Local Control:**	1x Power LED 1x Status LED 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	• 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	• 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	• 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.**

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