



Weather resistant, sturdy and robust, the Field-Coder II microwave transmitter is ready for the demanding conditions of field production and news gathering.

The base unit is a 1W digital transmitter and encoder with full COFDM DVB-T specifications. An optional external 4W PA and weatherproof power supply is available to allow the Field-Coder II to provide the long distance links needed in many news and production environments.

### Applications:

- ▶ HD Ready
- ▶ ENG Portable Systems
- ▶ Temporary Microwave Links

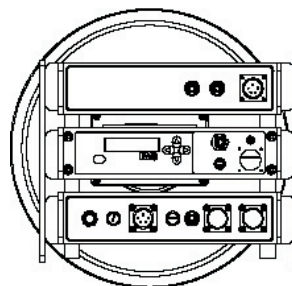
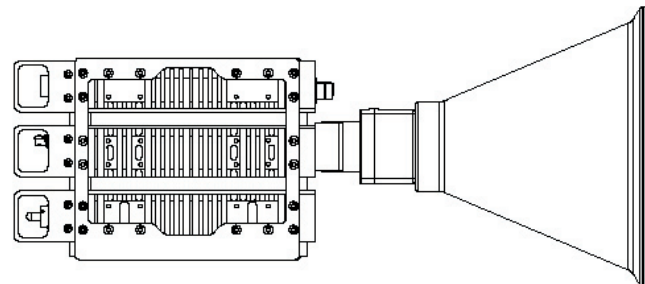
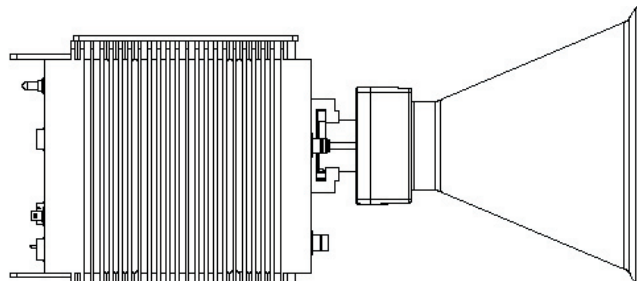
### Key Features:

- ▶ Digital Transmission
- ▶ 6 MHz Occupied Bandwidth Feature
- ▶ Simple Set-up and Operation
- ▶ 8 Presets
- ▶ Selectable Channel Plans
- ▶ Field-Proven Design
- ▶ Intuitive Operator Controls
- ▶ DVB-T Standard-Compliant

### Companion Systems & Accessories:

- ▶ FCII-AC, Weatherproof AC to DC Converter
- ▶ FCII-MAX, 4 Watt COFDM Power Amplifier
- ▶ Tripod with Mount
- ▶ Horn Antenna
- ▶ Parabolic Antenna

An important feature for 2 GHz BAS relocation applications is the ability to transmit a clean 6 MHz RF spectrum, allowing adjacent channel operation of two 6 MHz signals in a 12 MHz channel.



\* FCII shown with optional system modules

All Data Subject to Change Without Notice

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Field-Coder II (TCII) System	
Frequency Range (250 KHz Resolution)	1.99-2.5 GHz 2.3-2.7 GHz
Power Output	1 Watt Max. Adjustable (Presets): 25 mW, 100mW, 250mW

System Power Requirements	
Power Input	+11 to +32 VDC
Consumption	56 Watts Max. with 1 Watt RF Output

Environmental Characteristics	
Temperature	-20 to +55 °C (Oper.)
Relative Humidity	Up to 98% NC Weatherproof Housing
Altitude	15,000' ASL (Oper.)

Physical Characteristics	
Dimensions	10.5"W x 11.25"D x 2.15" H (Excl. Connectors and Handles)
Weight	~ 6lbs.

MPEG Encoder	
MPEG-2 4:2:0 SP@ML	1.5-15 Mb/s; 0.1 Mb/s Resolution
MPEG-2 4:2:2 MP@ML	1.5-32 Mb/s; 0.1 Mb/s Resolution
Audio Sampling Rates	2: 32, 64, 128, or 192 kb/s per Ch.
GOP Structure	Variable GOP
System Delay	<80 mS (Lowest End to End)
Data Channels	1: (RS-232 = 1200 bps)

Video Performance	
Return Loss	26 dB (10 Hz to 5 MHz)
Video SNR	67 dB Typical

User Interface	
Front Panel Display	High Luminosity Fluorescent
Power Switch	Toggle Switch
Configuration Control	5 Membrane Switches
Preset Configurations	8

Inputs	
Digital Video In	SDI with Embedded Audio (SMPTE 259C CCIR 601)
Analog Composite Video In	NTSC or PAL
Audio In	2: 32, 64, 128, or 192 kb/s per Ch.
ASI In	75 ohm (HD Capable)
RS-232 Side Data Ch.	9600 Baud
RS-232 Remote Control	1200 Baud for Remote Operation

COFDM Modulator	
Bandwidth	6, 7, 8 MHz Selectable
Constellation	QPSK, 16 QAM, 64 QAM
Parameters	Selectable Data Rate, Guard Interval, and FEC Rate
Carriers	2k Per DVB-T (ETSI EN 300744)
Scrambling	Proprietary 6 Digit PIN Code
FEC	Reed-Soloman, Viterbi

Channelization	
Channel Plan	30 Ch. per BAS Relocation Plan User Selectable & Programmable Comes Pre-Loaded w/both BAS 17 & BAS 12 Channel Plans
Source	Digital Frequency Synthesizer
Freq. Stability	± 0.0005%

Connectors	
RF Output	Type N
Signal Input	BNC (Input menu selectable)
Analog Audio Input	5 Pin Mini XLR (comes w/Break-out cable to XLR's)
DC Input	PT02H-8-4P
Data Input	DCE 9 Pin "D" Connector (Sockets)
Remote Input	DCE 9 Pin "D" Connector (Sockets)

Accessories	
FCII-Max	4W External Power Amplifier
FCII-AC	External AC to DC Power Supply
BMA-16H-FCII	16dB; Horn Antenna with Field-Lock Mount
Parabolic Antenna	Consult Factory

### FCII-Max Power Amplifier



User Interface	
RF Output Frequency	1.99-2.5 GHz, 2.3-2.7 GHz
RF Power Output	Up to 4W
Environmental Characteristics	
Temperature Range	-20 to +65 °C
Relative Humidity	Up to 98% NC
Altitude	15,000' ASL
Physical Characteristics	
Size	~ 9" W x 11" D x 2.5" H (Excluding Connectors)
Weight	~ 6 lbs.
Power Requirements	
Module Power	28 VPC input @ <TBD> Amps.
Connectors	
Connections	DC Power in PT02E-8-4P RF Input N (f), RF output N (f)
Output Protection	Final Amp Protected Against open or shut circuit

### FCII-AC Power Supply



Connectors	
AC Input	PT02E-14-5P
DC Output (2x)	PT02E-8-4S
Options	
FCII	Field Coder II
FCII-Max	4 Watt COFDM Power Amplifier
AC Power Cord	
DC Power Cord	

User Interface	
Power Switch	Toggle Switch
DC on Indicator	Green LED
Fuses	AC & DC Fuses in Slotted Cap Fuse Holders
Environmental Characteristics	
Temperature Range	-20 to +65 °C
Relative Humidity	Up to 98% NC
Altitude	15,000' ASL
Physical Characteristics	
Size	~ 9" W x 11" D x 2.5" H (Excluding Connectors)
Weight	~ 6 lbs.
Power Requirements	
Output Power	150 Watts @ 28 VDC
Input Voltage	Universal AC Input (90-264 VAC)

\* Both units come standard with all electrical cables and mounting hardware