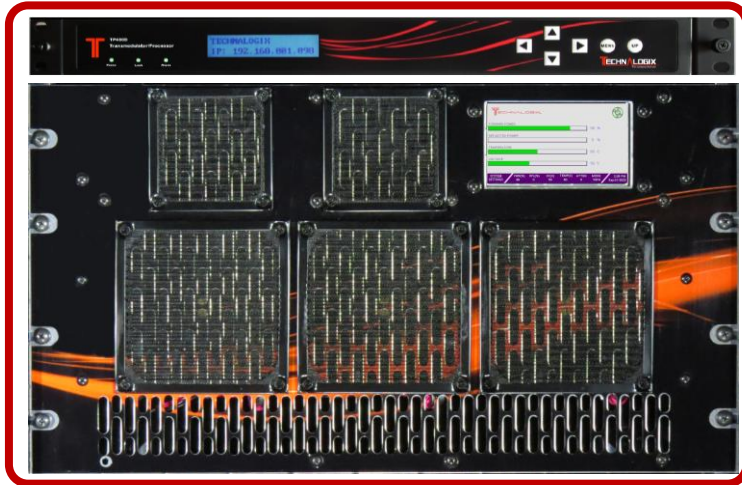


500-watt VHF Band III Digital Transmitter



- 4 channels (2HD/2SD or 1HD/3SD) 8VSB RF output
- PSIP/PSI descriptors generator/injector with VCT
- Remultiplexer with PID editor, ASI injection, remap, restamp, grooming, and add-drop
- MPEG2/MPEG4 video encoding
- Full color touchscreen display, with Ethernet and SNMP
- Internal RF isolator, efficient switching power supply
- EAS input and control through GPI or SNMP
- Dynamic PSIP input from any external EIT EPG generator
- Excellent video quality and lower bitrates through triple pass video motion estimation
- 2 Year Warranty on Amplifier
- 1 Year Warranty on Modulator
- ATSC 3.0 Available on Select Modulators

This system includes: TAVD-500H Amplifier, TP1000 4 channel Encoder/Mux/Modulator

Note: Other configurations available:

- TP1800 Transmodulator 4-8VSB In, 1 Agile 8VSB Output
- TM900 Agile Adaptive Digital Modulator ATSC 1.0/3.0
- TM500 Low-Cost Digital Modulator

RF CHARACTERISTICS

| | | |
|---------------------------------|------------|----------------------------------------------------------------------------------------------------|
| Frequency Range | Modulator: | 50 – 860 MHz RF Input 55 – 858 MHz RF Output (band center) |
| Frequency Step Size | Amplifier: | 174 – 216 MHz (VHF Band III) |
| Input Power | | 12.5 kHz |
| Transmitter Output Power | | 0 dBm (nominal) into power amplifier from translator |
| Power Level | | 500W (other levels available upon request) |
| Impedance | | Adjustable 10 – 100% through amplifier |
| Modulation | | Output of amplifier 50 Ω, N female |
| Spurious | | 8VSB, QAM (output power will change between standards) - 60 dBc including harmonics With Filter |

AUDIO / VIDEO INPUT CHARACTERISTICS

| | |
|-----------------------------|----------------------------------------------------------------------------------------------------------|
| Digital Audio Inputs | SDI embedded – (1) stereo pair or pass through compressed |
| Digital Audio Format | Selectable Dolby Digital / AC3 / Stereo / 5.1-7.1 pass-through / MPEG2 / AAC |
| Analog Audio Inputs | Optional AV/L-R balanced-unbalanced audio embedded available upon request |
| Digital Video Inputs | (4) HD / SD SDI with embedded audio |
| Analog Video Inputs | Optional CVBS / Component / HDMI / VGA / DVI adapter available upon request |
| Input Resolution | Auto detect any resolution |
| Video Scaler | Scaler function can be selected on standard software to scale the input to lower resolution for matching |
| Encoding Modes | MPEG2 / MPEG4 H264 selectable by software per each channel |
| Encoding Latency | Ultra-low delay 50 milliseconds encoding |
| Encoding Bitrates | User selectable from 0.5 to 20 Megabits/s per channel (VBR / CBR stat mux) |
| Encoding Control | Video bitrate, CBR / VBR, ultra-fast encoding modes, 1080P MPEG2 mode |
| Features | All Closed Caption and TXT formats, Crystal-View technology |

ASI INPUT / OUTPUT

| | |
|---------------------------|--------------------------------------------------------------------------------|
| ASI Inputs | (1) SPTS / MPTS |
| Remultiplex | Generate, inject, remap, restamp, grooming, add / drop; Stat Mux |
| Max Input Bitrate | 214 Megabit/s |
| ASI Outputs | (2) Mirror |
| ASI Output Format | Selectable 188 / 204 bits |
| Transport Stream | ASI Mux MPTS ready for exciters, STLs, and uplinks |
| Max Output Bitrate | Fixed payload selectable to 19.3 Megabit/s (ATSC) or any other value as needed |

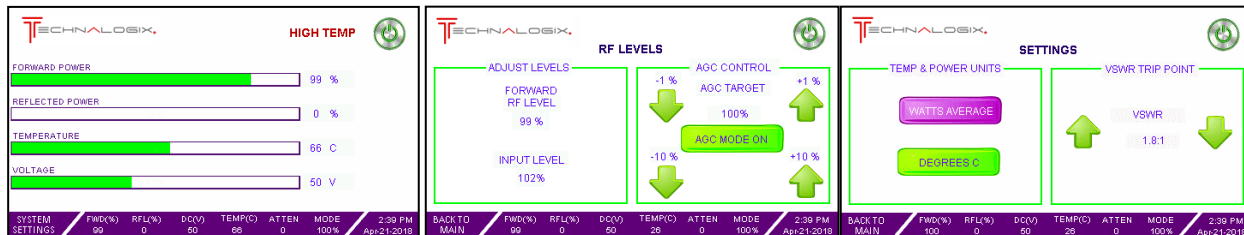
** Due to continuous product improvements, Technalogix reserves the right to change specifications without notice. **

IPTV OUTPUT

| | |
|----------------------------------|---------------------------------------------------------------------------------------------|
| IP Streaming Output | (1) 100 / 1000 auto |
| Mux IP Stream Output | (1) Same as ASI MPTS Mux but over IP – ready for IP STLs, excitors, etc. |
| SPTS Single Stream Output | (4) Selectable RTP / RTSP / UDP Single Program Transport Streams, IGMP, Multicast / Unicast |
| IPTV Bitrates | Same as ASI Mux output for the MUS stream, same as each encoder for the SPTS streams |
| Transport Stream ID | TSID |

INTERFACE

| | |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DB25 Remote Port | Control: RF carrier on/off, RF power up/down, reset Monitor: Forward/reflected RF level, control PCB Vcc Flags: Overdrive, VSWR (adjustable trip point), high temperature |
| Ethernet | Control: RF carrier on/off, RF power up/down, AGC/manual mode, change VSWR trip point, reset Monitor: Forward/reflected RF level, pallet voltage, RF input level, temperature, VSWR trip point, model/serial number Flags: Carrier on/off, overdrive, pallet voltage, VSWR, RF input, temperature, AGC / manual |
| SNMP | Control: RF carrier on/off, RF power up/down, AGC/manual mode, change VSWR trip point, reset Monitor: Forward/reflected RF level, DC pallet voltage, RF input level, temperature, pallet current, attenuation, run time, RF fault, model/serial number Flags: Overdrive, VSWR, temperature, SNMP error |



Screenshots off Touchscreen Interface

PHYSICAL FEATURES

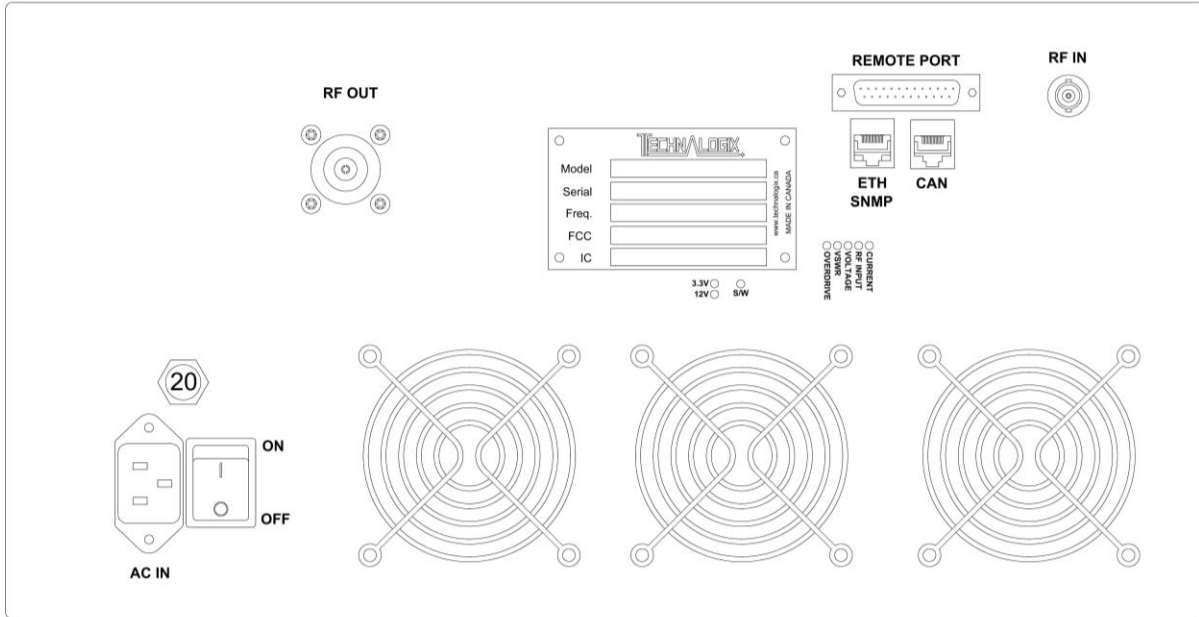
| | |
|------------------------------|----------------------------------------------------------------------------------------------------------------------------|
| Minimal Rack Space | Amplifier: 6U (H) x 30" (D) x 19" (W) Power Supply: 2U (H) x 30" (D) x 19" (W) Modulator: 1U (H) x 18" (D) x 19" (W) |
| Enclosures | Lightweight Aluminum |
| Operating Temperature | 0 to +45° C |
| Humidity | 90%, non-condensing |

ELECTRICAL CHARACTERISTICS

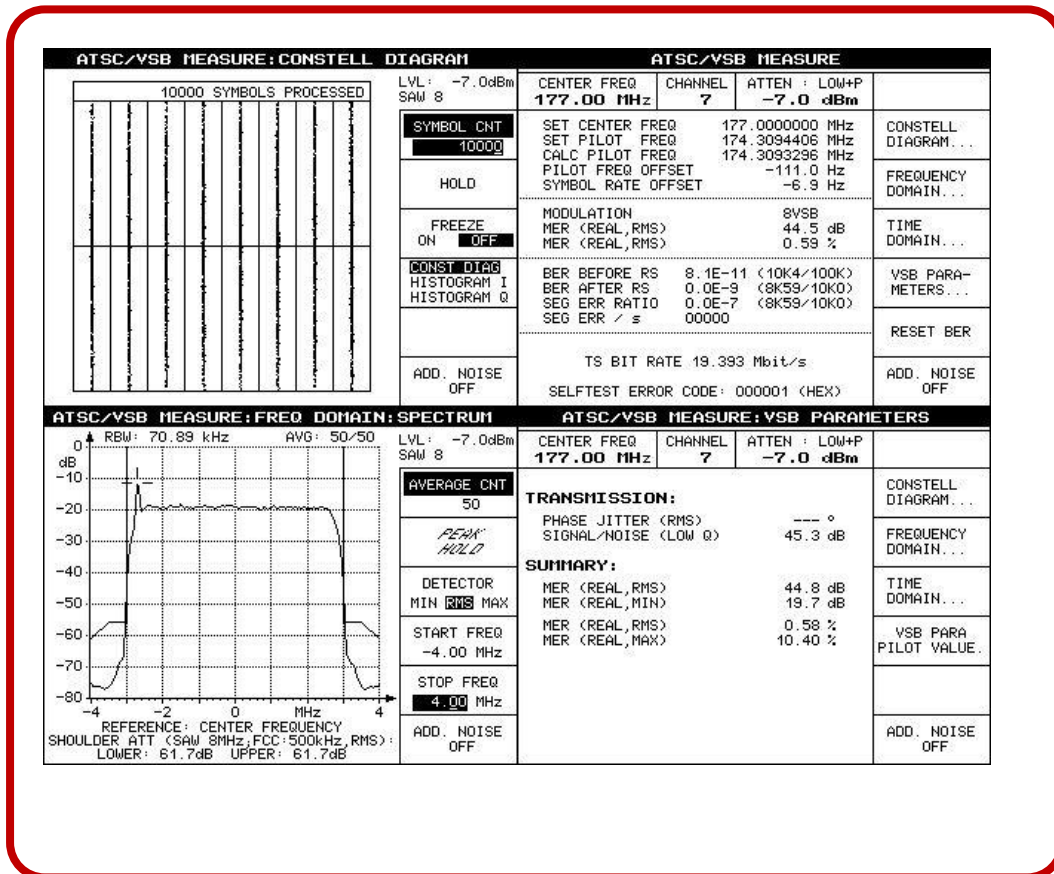
| | |
|--------------------------|--------------------------------------------------------------------------|
| Flexible AC Input | 180-260 Vac input Single phase (other options available upon request) |
|--------------------------|--------------------------------------------------------------------------|

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500-watt VHF Band III Digital Transmitter



All Specifications are Approximate. Taken with TP-1000 Modulator



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