

EtherMPX v3



TECHNICAL SPECIFICATIONS

EtherMPX v3 - Technical specifications

GENERAL	
Model name	EtherMPX v3
Dimensions	19" 1U chassis
Power supply	230VAC 50Hz, 12W per device
Operating temp	-20 to +60 Celsius
Transport protocol	Proprietary UDP Unicast or Multicast based on RFC2365 and IGMPv2 (RFC2236)
Sync protocol	PTPv2 (IEEE1588-2008 based)
QoS management	IETF RFC2474 compliant
SNMP management	SNMPv1 (for v4 EtherMPX devices)
Audio compression	None (Linear PCM)
Audio resolution	8 – 24bit for Digital L/R & MPX input 24bit for Analog L/R & MPX output 24bit for Digital L/R & MPX output
Audio sample rate	8 – 192kHz input for Digital L/R input 48kHz internal for Analog L/R input 174–192kHz input for Digital MPX input 192kHz internal for Analog MPX input
Audio latency	L/R mode: 10.0–125.0mS, user adjustable MPX mode: 5.0–62.5mS, user adjustable Low Latency Option: Down to 5.0mS (for L/R), 2.5mS (for MPX)
Network usage	L/R mode: 2.37 Mbit/s typical MPX mode: 4.74 Mbit/s typical
Audio monitor	Stereo ¼" Female jack in front panel
User interface / control	Locally: Front panel UI (LCD + buttons) Remotely: EtherMPX NMS Software

DECODER	
Input name	Port A
Input type	Digital electrical interface
Connector	XLR-3 female
Impedance	110 Ohm balanced - transformer isolated
Supported formats	AES3, IEC60958, S/PDIF
Maximum data rate	12.3 Mbit/s typical
Audio sample rate	32 – 192 kHz (174 –192kHz for D-MPX)
Audio sample resolution	24 bit

Input name	Port B
Input type	Analog electrical interface - 2 outputs, 1 input
Connectors	2 x XLR-3 female (balanced R, L/MPX) output 1 x BNC female (unbalanced MPX only) output 1 x BNC female (unbalanced MPX only) AUX in **XLR is DC coupled, BNCs are AC coupled
Impedance	1 kOhm
DAC resolution	24 bit
DAC sample rate	48kHz for L/R input, 192kHz for A-MPX
DAC THD+N	-108dB (0.0004%) at 48kHz L/R output -96dB (0.0015% at 192kHz MPX output
DAC Dynamic range	129 dB (A-weighting) at 48 or 192kHz
Channel separation	124 dB typical
Reference input	3.47Vpp (+4dBu) for 0 dBFS
Input BW @ 48kHz SR	-0.1dB @ 21.8 kHz
Input BW @ 192kHz SR	-0.1dB @ 87.2 kHz

ENCODER	
Input name	Port A
Input type	Digital electrical interface
Connector	XLR-3 female
Impedance	110 Ohm balanced - transformer isolated
Supported formats	AES3, IEC60958, S/PDIF
Maximum data rate	12.3 Mbit/s typical
Audio sample rate	32 – 192 kHz (174–192kHz for D-MPX)
Audio resolution	24 bit

Input name	Port B
Input type	Analog electrical interface - 3 inputs
Connectors	2 x XLR-3 female (balanced R, L/MPX) input 1 x BNC female (unbalanced MPX only) input **XLR is DC coupled, BNC is AC coupled
Impedance	1 kOhm
ADC resolution	24 bit
ADC sample rate	48kHz for L/R input, 192kHz for A-MPX
ADC THD+N	-106dB (0.0005%)
ADC Dynamic range	121 dB (no weighting)
Channel separation	135 dB typical
Reference input	3.47Vpp (+4dBu) for 0 dBFS
Input BW @ 48kHz SR	-0.1dB @ 20 kHz
Input BW @ 192kHz SR	-0.1dB @ 80 kHz

SFN OPTION – SYNC SIGNALS	
Input SYNC (optional)	10MHz sine, 0dBm typical
Input type	Analog electrical interface
Connector	BNC female (unbalanced)
Impedance	50 Ohm

Output SYNC (optional)	10MHz CMOS 3.3V
Output type	Analog electrical interface
Connector	BNC female (unbalanced)
Impedance	50 Ohm



This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE: Technical specifications are subject to change without notice. Please contact us if you have questions, or to get latest information and updates.