



# INTRAPLEX<sup>®</sup> MPX BRIDGE

Bidirectional analog/digital MPX converter

Introducing the Intraplex MPX Bridge, a versatile and powerful solution for seamless full duplex analog FM MPX to digital FM MPX conversion. Designed in a compact ½ RU form factor with an external power supply, the MPX Bridge is perfect for space-constrained installations or portable use while delivering high-end performance. It supports both digital MPX via AES3 and analog MPX, ensuring exceptional audio fidelity.



## Intraplex<sup>®</sup> MPX Bridge Product Features

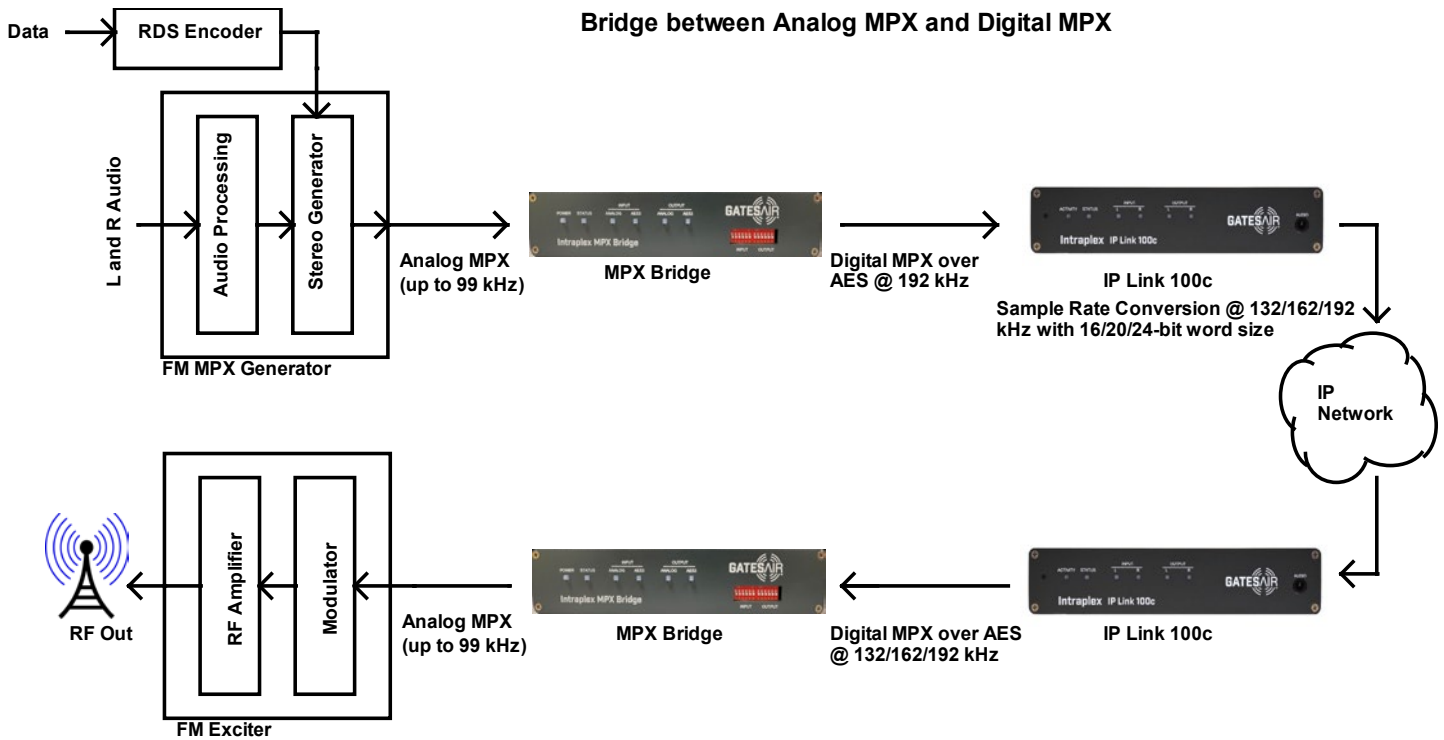
The MPX Bridge offers the same high-performance audio quality as the renowned Intraplex IP Link MPXp, including a high dynamic signal range and an ultra-flat frequency response, which guarantees superior FM stereo separation. With user-settable input and output analog levels, dual AES3 outputs for driving multiple external codecs, and comprehensive MPX input/output signal level monitoring, MPX Bridge is built for flexibility, connectivity, and precision. SynchroCast compatibility further enhances its utility in synchronized broadcast applications.

- Full duplex analog FM MPX <-> digital FM MPX conversion
- ½ RU form factor with external power supply
- Digital MPX: AES3 at 192 kbps
- Analog MPX: 0 to 99 kHz
- 24-bit ADC and DAC sampling rate at 192 kbps
- Same high performance as Intraplex IP Link MPXp: High dynamic signal range, ultra flat frequency response for excellent FM stereo separation
- User settable input/output analog levels
- Dual AES3 outputs for driving multiple external CODECs
- MPX input/output signal level monitoring
- SynchroCast compatible
- Front panel contains:
  - LEDs
    - Tri-color LED for signal level monitoring
    - System monitoring for alarms and alerts
  - Switches for input/output signal level (0 to 16 dBu)
- Rear panel contains:
  - External universal power supply
  - BNC: Analog input/output
  - XLR: One AES3 input and two AES3 outputs
  - D-sub: Contacts for alarm and alert conditions

The Intraplex MPX Bridge is the ideal choice for broadcasters seeking a reliable, high-performance MPX conversion solution.



## Use Case



# Intraplex<sup>®</sup> MPX Bridge

## Specifications

Specifications and designs are subject to change without notice

Mechanical	
Chassis	1/2 RU
Power Supply	External universal AC/DC (12V)
Analog MPX	
MPX Analog In	One channel, 1 BNC connector
Analog Level In	<ul style="list-style-type: none"><li>Variable input, 0 to 16 dBu in 1 dB steps</li><li>User settable level using DIP switches</li></ul>
Sampling Rate In	192 ksps
MPX Analog Out	One channel, 1 BNC connector
Analog Level Out	<ul style="list-style-type: none"><li>Variable output, 0 to 16 dBu in 1 dB steps</li><li>User settable level using DIP switches</li></ul>
Analog Performance	<ul style="list-style-type: none"><li>24 bit ADC and DAC</li><li>Total Distortion: (THD+N ) less than 0.003%</li><li>Dynamic Range: Greater than 90 dB</li><li>Bandwidth: 0.1 Hz to 88 kHz, -1 dB</li><li>20 Hz to 53 kHz gain is +/- 0.05 dB</li><li>24-bit sampling at 192 ksps</li></ul>
Impedance	<ul style="list-style-type: none"><li>Input impedance: Greater than 10 kOhm, jumper settable to 75 Ohms</li><li>Output impedance: Less than 10 Ohms, jumper settable to 75 Ohms</li></ul>
Digital MPX	
AES3 Out	<ul style="list-style-type: none"><li>Two channels on 2 XLR connectors</li><li>AES3 sample rate fixed at 192 kHz</li><li>Conversion of MPX analog to AES3</li></ul>
AES3 Sample Rate Timing	Internal timing +/-50 PPM
AES3 In	<ul style="list-style-type: none"><li>1 XLR</li><li>Accepts sample rates greater than 32 ksps</li><li>Conversion of AES3 in to MPX analog out (Left channel only)</li></ul>
Other	
SynchroCast compatible	Yes
GPIO	9 pin Sub D connector
Contact Outputs	<ul style="list-style-type: none"><li>Contact 1: Status</li><li>Contact 2: AES3 input lock/sync</li><li>Contact 3: Analog input low signal</li><li>Contact 4: AES3 input low signal</li></ul>
Front Panel	
Analog/AES3 Input	<ul style="list-style-type: none"><li>Tri-color, single LED, level monitoring</li><li>0 to -3 dB FS: Red</li><li>-3 to -12 dB FS: Yellow</li><li>-12 to -50 dB FS: Green</li><li>-50 or less: Off</li></ul>
Analog/AES3 Output	<ul style="list-style-type: none"><li>Tri-color, single LED, level monitoring</li><li>0 to -3 dB FS: Red</li><li>-3 to -12 dB FS: Yellow</li><li>-12 to -50 dB FS: Green</li><li>-50 or less: Off</li></ul>
Status	Tri-color LED (Normal, Alert, Alarm)
Power	Green LED
Other	Two DIP switch banks: One for analog input level. One for analog output level.
Rear Panel	
Rear Panel	<ul style="list-style-type: none"><li>Two BNC connectors for analog MPX</li><li>Three XLR connectors for AES3</li><li>9 -pin Sub-D for GPIO</li><li>One DC Power Input</li></ul>
Compliance	
Regulatory Compliance	CE, FCC Part 15 Class A, IEC 60950, RoHS