SpanFM Encoder

making digital broadcasting **work** **Phone +1.902.823.2233 / +33.299.146.332** **info@nautel.com / contactdigidia@nautel.com** **www.nautel.com**

APPLICATIONS

- Headend/Encoder for single frequency networks in FM (Ideal for roadway or coverage area expansion)
- Encoding of audio and RDS data with time stamp insertion for synchronization

KEY BENEFITS

- Field Proven: Used Worldwide
- Extremely portable solution supported on industrial PC platforms (1RU,2RU, 4RU, Cube)
- Flexible and compact all in one box solution: Multi-encoding and multi-multiplexing solution
- Easy to use thanks to user friendly GUIs and straight forward architecture
- Integrated GPS Receiver (optional)
- Seamless 1+1 redundancy

2RU CONFIGURATION

4RU CONFIGURATION

TECHNICAL SPECIFICATIONS

INPUTS / OUTPUTS

1 x digital (balanced) on RCA or S PDIF coaxial connector

or

1 x analog (balanced, 10kΩ minimum) audio input via internal audio PCI board (hardware option)

4 x digital (balanced, 110Ω) or 4x analog (balanced, 600Ω) audio input on female XLR inputs via external audio panel (hardware option)

IP output for synchronous FM distribution on Ethernet 10/100 Base T – RJ45 connector:

- ETI FM Multiplex over DCP output for transport of MPEG 1/2 2 encoded audio
- MPXA Multiplex over DCP output for transport of 192kHz sampled MPX

UECP for RDS data on Ethernet RS232 DB9 connector with interfaces tailored to the RDS distribution system of the operator

CONTROL AND MONITORING

Remote control through a web server with user friendly GUI

SNMP Monitoring (MIB V2)

FEATURES

One box solution for Synchronous FM head end

Different Industrial PC platforms on Windows OS available: 4RU, 2RU, 1 RU or Mini-PC. Dual auto-range power supply RAID, 1 Hard Disk Redundant System for 2RU and 4RU.

Multi-encoder for different audio contents

MFN and SFN operation (NTP client included)

Optional PCIe board with integrated GPS Receiver and NTP Server for synchronization

SOFTWARE OPTIONS

Additional MPEG-1 / 2 Audio Layer 2 audio encoder

Basic RDS Data encoder software

MPX formatter for creation of MPX from audio input and RDS

MPXA Multiplexer: Transport of an MPX over IP with uncompressed audio

ETI FM Multiplexer: MPEG 1/2 2 Encoded Audio Transport over IP

ELECTRICAL

AC Input: 110-240 V, 50/60 Hz

MECHANICAL

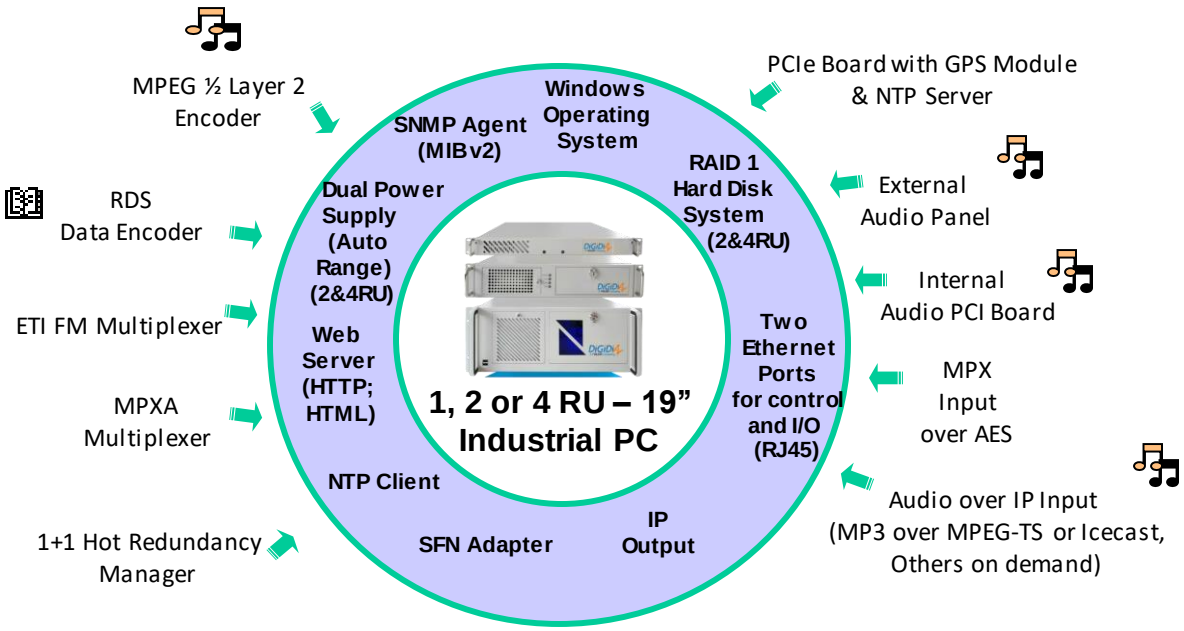
Temperature Range:

- Operating: 0°C to 50°C
- Storage: -20°C to 70°C

Humidity: 10% to 90% at 50°C

OPTIONAL AUDIO PANEL

CUSTOMIZE YOUR SYNCHRONOUS FM HEADEND



ORDERING INFORMATION (FOR MINIMUM CONFIGURATION)

~ OPT-IPC1RU	1RU Industrial PC Platform
~ OPT-IPC2RU	2RU Industrial PC Platform
~ OPT-IPC4RU	4RU Industrial PC Platform
~ OPT-MINIPC	Industrial Mini PC Platform

OPTIONS

~ OPT-AUDIO IN	Internal Audio Board for 1 digital and 1 analog audio
~ OPT-PANEL	Audio Panel (external 1RU hardware option, up to four audio inputs)
~ OPT-GPSRX	PCIe board with GPS module and NTP server
~ OPT-SFM-RDS INSERTER	RDS Inserter
~ OPT-SFM-ADDAUDIO	Additional Audio Encoder
~ OPT-SFM-MPXA MUX	MPX Transport over IP
~ OPT-SFM-MPXA FORMAT	MPX Audio Formatter
~ OPT-SFM-ETI FM MUX	MPEG 1 Layer 2 Encoded Audio Transport over IP