



APPLICATIONS

- DRM broadcasting (DRM30 and DRM+)
- DRM head end in studios or directly on the transmitter site
- DRM test transmission in trials or laboratories

KEY BENEFITS

- Field Proven: Used in India - the world's biggest DRM roll out with Nautel MW transmitters
- Extremely portable solution on different industrial PC platforms (1RU,2RU, 4RU, Cube)
- Flexible and compact all in one box solution: Multi-encoding and multi-multiplexing for DRM30 and DRM+
- Easy to use thanks to user friendly GUI
- Seamless 1+1 redundancy

TECHNICAL SPECIFICATIONS

INPUTS / OUTPUTS

With internal audio PCI board (hardware option):

Up to 2 either

- Digital Audio (48kHz)/MPX (192kHz) input on XLR connectors

or

- Analog Audio input on XLR connector

With external audio panel (hardware option)

4 x Digital (balanced, 110Ω) or
4x Analog (balanced,
600Ω) Audio input on female XLR
input

GPS antenna Input for integrated
NTP Server (optional)

Audio over IP input: AES67, MP3
over Icecast or MPEG TS, Livewire,
and others on demand

MDI output(s) compliant with TS102
820 and TS 102 821 on Ethernet
10/100 Base T – RJ45 connector

IP Input for data services with
interfaces to different playout
systems

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

TECHNICAL SPECIFICATIONS

FEATURES

DRM content server compliant with ES 201 980

Different Industrial PC platforms on Windows OS available: 4RU, 2RU, 1RU or Mini-PC. Dual Auto-range Power Supply RAID, 1 Hard Disk Redundant System (for 2RU and 4RU Platform only)

Can be completely virtualized
FAC, SDC and MSC Management

All A,B,C and D modes for DRM30, E mode for DRM+

MFN and SFN operation (NTP client included)

DRM 4.5/5/9/10/18 and 20kHz channel bandwidths for DRM30, 100kHz channel bandwidth for DRM+

All standard QAM modes (MSC 64 or 16 and SDC 16 or 4)

Hierarchical symmetrical / Hierarchical mixed constellations and mapping

Short and long interleaving process (0.4s and 2 s)

Equal and unequal protection (EEP/UEP) coding rates from 1/4 to 8/9

Dynamic Reconfiguration supported

AUDIO ENCODER SOFTWARE OPTIONS

- HE AAC v2 encoder (mono, stereo or parametric stereo) with SBR

- xHE AAC audio encoders on demand

All audio encoders are delivered with DRM Text Message Feature and 8/12/16/24 kHz sample rates

DATA ENCODER SOFTWARE OPTIONS (PAD AND NPAD)

- News Service Journaline
- Broadcast Website
- Slide Show
- Electronic Program Guide
- TPEG

Pull Data clients for text and pictures : HTTP, FTP, JASON

FTP Server for data push

PRBS pattern for testing

1+1 Redundancy

Unicode/UTF-8 Support for all international characters for DRM Text Messages, Journaline and DRM service labels

OTHER SOFTWARE OPTIONS

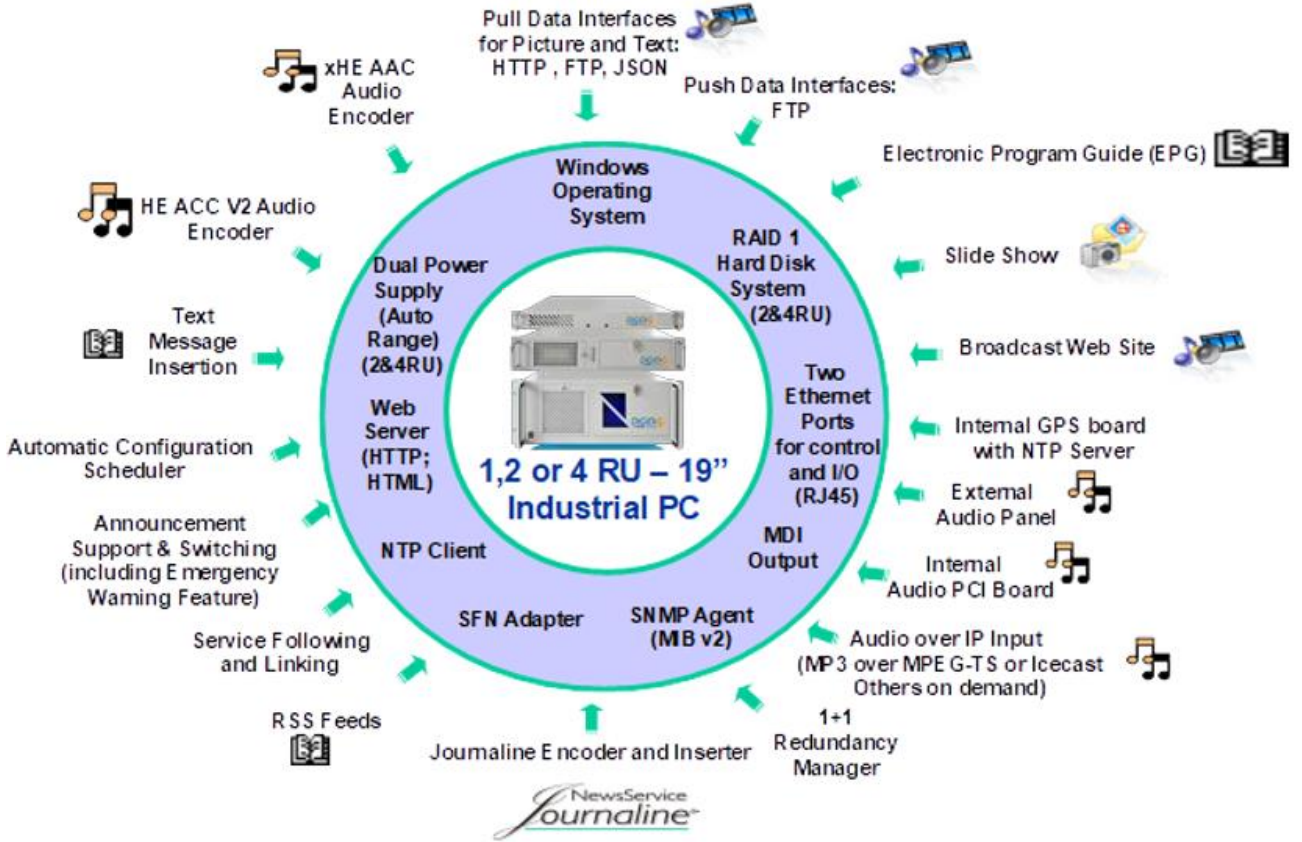
- Announcement Support and Switching : EWF (Emergency Warning Feature) and Travel, News, Weather
- Service Following and Switching
- Automatic Scheduler

CONTROL AND MONITORING

Remote control through a web server with user friendly GUI

SNMP Monitoring (MIB V2)

CREATE YOUR OWN DRM MULTIPLEXING SYSTEM



ORDERING INFORMATION

PC Platforms

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

ORDERING INFORMATION

HW Options

~ OPT-DUAL AUDIO	Internal Audio Board for up to 2 either digital audio or digital MPX or analog audio inputs
~ OPT-PANEL	Audio Panel (external 1RU hardware option, up to four analog or digital audio inputs)
~ OPT-GPSRX	PCIe board with GPS module and NTP server

SW Options

~ DRM-MUX	Atlo Content Server software for DRM30 and DRM+, includes 1 HE AAC encoder and 4 Journaline Applications
~ OPT-DRM-xHE AAC DRM+	xHE AAC audio encoder and text message inserter for DRM+ (up to 4)
~ OPT-DRM-XHE AAC DRM30	xHE AAC audio encoder and text message inserter for DRM30 (up to 4)
~ OPT-DRM-SLS-DATA	SLS Data Option (per application, up to 4)
~ OPT-DRM-AOIP	Audio over IP input (per input)
~ OPT-DRM-BWS DATA	BWS MOT Data inserter (per application)
~ OPT-DRM-EPG DATA	EPG MOT Data inserter
~ OPT-DRM-TPEG DATA	TPEG MOT Data inserter
~ OPT-DRM-ANNOUNCE	Announcement Support and Switching (including EWS, one per DRM multiplex)
~ OPT-DRM-SFL	Service Following an Linking (one per DRM multiplex)