

# WAVE 2000 - NEXT 2kW FM TRANSMITTER

## COMPACT VERSION

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### **Prognostics**

Analysis for predictive maintenance

### **Easy Care**

Hot pluggable PSU - Easy to replace fans  
Redundant power supply option

### **Controls**

LCD display, Web server and SNMP

### **Integrated unique features**

Micro SD card slot  
FM, Satellite and Terrestrial receiver

### **Advanced Efficiency Boost**

Efficiency over 75% with adaptive optimization

### **Digital Processing**

Unique performances thanks to DDS digital modulator

### **Stereo & Soft clipper**

Always included

Audio processor  
Full telemetry with 3G/4G router

This manual provides important guidelines for installing. Review this information carefully for proper installation. Both unit specifications and manual contents are subject to change without notice.

# 305 Broadcast Next 2000

# NEXT 2kW FM TRANSMITTER



## GENERAL SPECIFICATION

Output frequency range	87.5 to 108MHz in 1Hz steps
Output Power	2kW (tol. +0/-0.5dB)
Output connector	7-16 DIN female
Spurious and harmonic suppression	Compliant with ETSI and FCC specification
Analog input	2x XLR female (Balanced; impedance 600Ω/10KΩ selectable)
MPX/SCA/RDS input	2x BNC female (Unbalanced; impedance 50Ω/10KΩ selectable)
Soft Clipper with band limitation	Included
Power consumption	Typ. 2,7kVA - Max. <3,1kVA
AEB - Advanced Efficiency Boost	Included
AC Input voltage and frequency	176-264Vac, 47 to 63Hz single phase (90-176Vac with limited output power)
AC/DC Power Supplies	AC/DC Power Supplies N.2 power supplies hot pluggable from the front panel
Operative temperature & fans	-5°C to +45°C @MSL. N.4 fans on the rear panel.
Maximum operative altitude	3000m ASL. For higher altitudes please contact our sales dept.
Maximum operative humidity	95% non-condensing
Housing	Rack drawer 19" 3U, depth 45cm
Weight	<19Kg



## SOFTWARE OPTIONS

S-AM-UN	Audio monitor for input or on-air signal + test tone generator
S-SD-UN	Micro SD card slot
S-AES-UN	Digital AES/EBU & AES192 (MPX over AES) inputs
S-FMRX-UN	FM receiver input (for regenerative FM repeater/ translator)
S-SWI-UN	Automatic input switching (n.3 MPX profiles – audio/ RDS)
S-RDS-UN	Static RDS coder
S-IP-UN	IP input (Icecast2 streaming & AES67)
S-DMPX-UN	Digital MPX over TS & Digital MPX over IP in/out
S-RDS+-UN	Dynamic RDS
S-ISO-UN	SFN/ Isofrequency operation
S-AP-DEL	Delossifier
S-AP-ARDS	Advanced RDS

Included in  
**S-FULL-UN**

Only  
with  
**H-AP**

## HARDWARE OPTIONS

H-SAT	Embedded Satellite receiver demodulator. DVB-S/S2 (L-band input) Low Symbol Rate with loop
H-SATDTT	Embedded Satellite and Terrestrial receiver demodulator. DVB-S/S2 (L-band input) and DVB-T/T2 and ISDB-T (VHF/UHF band input)
H-3G; H-4G	2G/3G or 3G/4G modem router for remote connection/telemetry and SMS
H-I/O	GPIO interface with n.3 isolated clean contact out, n.4 optoisolated in, n.4 analog out (0 to 5V), RF filter for router
H-AP-PRO	Integrated audio processor card with professional software license
H-SATDTT2	Second Redundant Embedded Satellite and/or Terrestrial receiver demodulator with seamless switching
H-CAM	CAM Slot (Common Interface Module)
H-ASI	ASI T.S. input (or output) interface
H-REF	10MHz and 1pps inputs
H-GNS	High stability reference oscillator GNSS (GPS + GLONASS) locked, oven clock 10MHz + 1pps outputs
H-AGNS	GPS/GLONASS receiving antenna (gain 26dB typ.) + 15 meters cable

# NEXT 2kW FM TRANSMITTER



The software-based audio processor can be integrated in any Wave Transmitter, from low and medium compact versions to high power line. **H-AP-PRO Audio Processor** offers outstanding audio quality and comes with many unique features.



## FM Composite Clipper

Up to 140% audio level at 100% modulation gives 2-3 dB extra headroom for highs. Improve your audio, being the loudest and cleanest station on the dial!

## Stereo & RDS Coder

Built-in stereo and RDS encoder  
RT+

## Advanced Dynamics & EQ

Increases the dynamics for music that lacks dynamics. Adjusts the spectrum without compression, making it possible to generate a very consistent sound without sounding compressed

## Dehummer

Improves the sound of MPEG2/MP3 style lossy compressed files, removing unwanted constant sounds, such as a 50/60 Hz hum from bad cables

## Better FM reception

Improves stereo reception area up to 30Km

## Declipper & Natural Dynamics

Repairs clipped audio, removes distortion  
Restores Natural Dynamics

## Delossifier

Improves the sound quality of MPEG2/MP3 style lossy compressed files