Romeo broadcast

ROMEO150 – 150W FM TRANSMITTER
COMPACT VERSION

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

Digital Processing
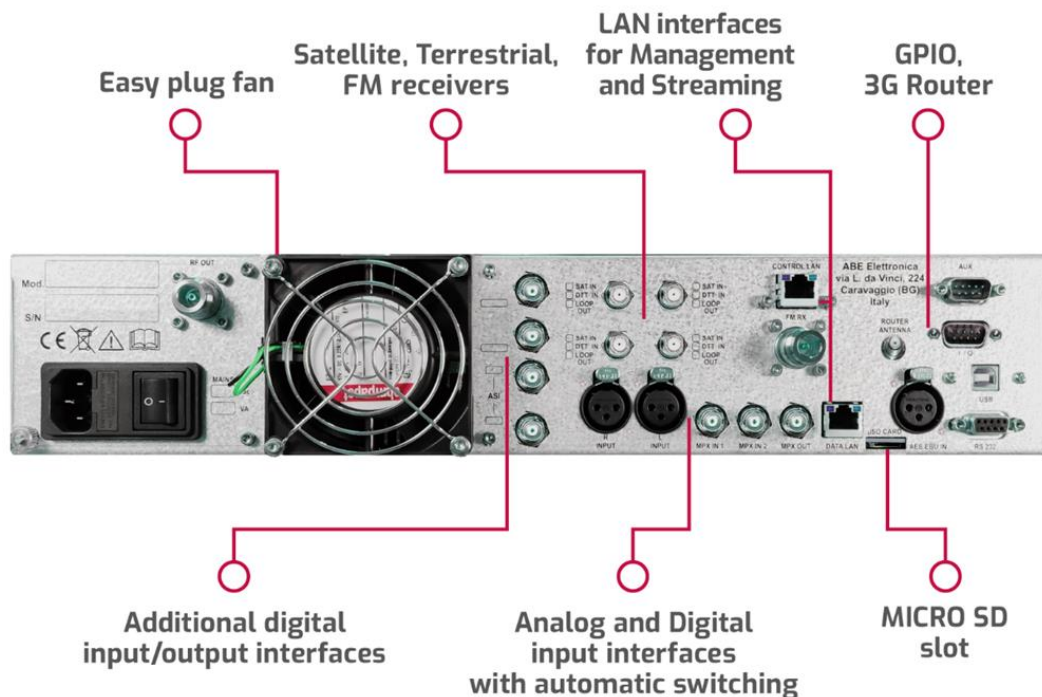Unique performances thanks to DDS digital modulator

Stereo & Soft clipper
Always included

Audio processor
Full telemetry with 3G/4G connection

GENERAL SPECIFICATION

Output frequency range	87.5 to 108MHz in 1Hz steps
Output Power	30 to 150W (tol. +0/-0.5dB)
Output connector	N 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. 270VA (@98MHz 150W power)
AEB - Advanced Efficiency Boost	Included
AC Input voltage and frequency	90-264Vac, 47 to 63Hz single phase
AC/DC Power Supplies	Single power supply
Operative temperature & fans	-5°C to +45°C @MSL. N.2 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" 2U
Weight	<12Kg

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	Included in S-FULL-UN
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	Only with H-AP
S-AP-ARDS	Advanced RDS	

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), mini UPS for remote control, 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

The software-based audio processor can be integrated in any Romeo 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

All specifications contained in this document may be changed without prior notice