

 Trasmittitore FM 15KW Integrato
 15KW FM Integrated Transmitter



Opera plus Family A07E1500X

EcoLine

- Fully digital controlled ✓
- High efficiency - Low consumption ✓
- Reliable and Money Saving ✓
- Hot Pluggable Power Supplies ✓
- 100% Remotable ✓

Features:

- Wideband circuits amplifiers with LD-Mos technology
- AAQ: Advanced Audio Quality
- Storage of events
- Built-in Fully digital controlled Modulator.
- Automatic Audio change-over / Dual L+R, Dual MPX or Mixed
- Automatic fold-back ROS & Temperature protection
- Ambient & RF Module temperature measurement
- 4 lines LCD alphanumeric display
- 3x5000W Ampli. in only one heat-sink for the highest reliability
- 9x3500VA HOT PLUGGABLE Power Supply with PFC
- Sealed duct cooling air with blowers
- Easy removable blower
- Harmonics filter & directional coupler built-in
- 28 unit 19" standard rack Cabinet
- GSM Telemetry, TCP/IP Webserver, SNMP, SMTP server.
- Front panel Headphone jack for audio monitor
- Plug&Play Modules - easily replaceable
- Metals treated with galvanic process



The picture is for illustrative purposes

OPERA plus 15KW FM 87,5÷108MHz transmitter uses 3x5000W amplifier with 6th generation LDMOS technology, 65:1 VSWR and 9x3500W Hot Pluggable Power Supplies.

The technical solutions adopted by our engineers are focused to assure energy saving (among the lowest) and high reliability. Settings, protections, telemetry are totally microprocessor controlled. The installation and the maintenance of the equipment are respectively very fast and easy. These fully protected transmitters are indicated for use in unmanned stations.





Options built-in:

- Digital Stereo Encoder Module
- RDS encoder
- AES-EBU digital audio input / Audio from IP
- Input & Output special dry contacts
- Bidirectional remote control by GSM/SMS
- Remote control by TCP-IP/WebServer/SNMP-SMTP
- Remote control by RS-232



MPX characteristics

| | |
|--------------------------------------|--------------------------|
| Signal input | MPX |
| Composite Input impedance | 10Kohm unbalanced |
| Input connector | BNC |
| Input level | Adjustable 0/+6/Variable |
| Audio freq. response (30Hz to 60KHz) | < 0,5 dB |
| Modulation distortion | <0.1% |
| Signal to noise ratio | >75dB |

Stereo characteristics

| | |
|--|---------------------------|
| Signal inputs | Left or Right - AES-EBU |
| Input impedance | 600ohm (bal.) or 10k ohm |
| Input connectors | Canon XLR |
| Unbalanced rejection | >40dB |
| Input level | Adjustable (Front/Remote) |
| Pre- emphasis | 75 or 50uS |
| Audio frequency response (30Hz to 15KHz) | <0.25dB |
| Audio frequency response (19KHz to 100KHz) | >50dB |
| Cross-talk between left and right channel | >50dB |
| Distortion at frequency deviation of 75KHz | <0.1% |
| Signal to noise referred at deviation of 75KHz | >77dB |
| Suppression of 38KHz | >50dB |

Specifications are subject to change without notice.

General specification

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|-------------------------------|--|
| Operating voltage | 400VAC \pm 15% 3phases or 230VAC \pm 10% Monophase > 71% |
| Typical Efficiency | Forced air |
| Cooling | up to 4000m (13123 ft) over sl |
| Operating altitude | < 21300W |
| Typical Consumption | -5° to 50°C |
| Operational temperature range | -20° to 60°C |
| Storage temperature range | 1+5/8" - 3+1/8" |
| Output RF connector | BNC |
| Monitor RF connector | 28U Cabinet - 360KG |
| Dimensions | |

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Radio frequency

| | |
|--|-----------------------------------|
| Frequency range | 87.5 to 108MHz |
| Frequency setting | in 10KHz or 100 KHz steps |
| Setting mode | By keys on the front panel/Remote |
| Frequency stability | < \pm 300Hz/year - 0.5ppm* |
| Frequency generation | PLL synthesizer |
| Modulation type | direct VCO frequency modul. F3 |
| Nominal frequency deviation | \pm 75KHz |
| Deviation linearity in all freq. range | \pm 5KHz |
| RF output power | 15KW \pm 0.3dB - Adjustable |
| Driver power | max 10W |
| Harmonics emission | <-70dBc* |

Modulation capability

- MONO (left and right)
- L-R & AES-EBU
- SCA + RDS
- Composite
- IP Audio



Power Amplifier Section



LOGIC UNIT

*In accordance with standards: EN60215:1989/A1:1992/A2:1994; EN301 489-1 V 1.9.2; EN301 489-11 V 1.3.1; EN302 018-2 RED V2.1.1

