



The picture is for illustrative purposes

Fully digital controlled - High efficiency for a low consumption - Reliable and Money Saving

Il trasmettitore OPERA plus FM 87,5÷108MHz da 2400W utilizza 2 pallet amplificatori LDMOS di 6^a generazione a larga banda con protezione ROS 65:1.

L'ingegnerizzazione adottata garantisce un elevato risparmio in termini di consumo energetico (tra i più bassi della categoria) e di trasporto grazie alle ridotte dimensioni ed al peso contenuto. L'installazione è facile e veloce.

La semplicità d'utilizzo unita ad una manutenzione veramente molto ridotta (pulizia filtro aria) rende questi trasmettitori ideali per stazioni non sorvegliate.

Caratteristiche:

- Amplificatori RF larga banda con tecnologia LD-Mos
- AAQ Advanced Audio Quality, per la migliore qualità audio
- Elenco eventi consultabile da display o interfaccia WEB
- Modulatore con sintetizzatore di frequenza digitale.
- Automatic Audio change-over / L+R, MPX or Mixed
- Protezione contro aumento del ROS di antenna con riduzione automatica della potenza di uscita (fold-back)
- Protezione di temperatura con riduzione di potenza (fold-back)
- Display LCD per controllo dei principali parametri
- 2 pallet per la massima affidabilità su unico radiatore
- 1 Alimentatore estraibile a commutazione per la massima affidabilità ed efficienza
- Aria di raffreddamento filtrata e canalizzata
- 2 ventilatori facilmente sostituibili
- Filtro delle armoniche e accoppiatore direzionale incorporati
- Rack da 19" da 3 Unità
- Telemetria GSM, TCP/IP SNMP & SMTP - Presa Cuffie
- Moduli Plug&Play facilmente sostituibili

OPERA plus 2400W FM 87,5÷108MHz transmitter uses 2x pallet amplifiers with 6th generation LDMOS technology, 65:1 VSWR.

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.

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 / L+R, MPX or Mixed
- Automatic fold-back ROS & Temperature protection
- Ambient & RF Module temperature measurement
- 4 lines LCD alphanumeric display
- 2x PA pallet in only one heat-sink for the highest reliability
- 1x HOT PLUGGABLE Power Supply with PFC
- Sealed duct cooling air with blowers
- 2 External easy removable blowers
- Harmonics filter & directional coupler built-in
- 3 unit 19" standard rack
- 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



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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



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 | >75dB |
| Suppression of 38KHz | >50dB |

Specifications are subject to change without notice.

General specification

| | |
|-------------------------------|--------------------------------|
| Operating voltage | 220V ÷ 240V AC |
| Typical Efficiency | > 71% |
| Cooling | Forced air |
| Operating altitude | up to 4000m (13123 ft) over sl |
| Typical Consumption | < 3260W |
| Operational temperature range | -5° to +45°C |
| Storage temperature range | -10° to +55°C |
| Output RF connector | DIN 7/16 |
| Monitor RF connector | BNC |
| Dimensions | 443x633x134 mm / 19Kg |

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 | < ±300Hz/year - 0.5ppm* |
| Frequency generation | PLL synthesizer |
| Modulation type | direct VCO frequency modul. F3 |
| Nominal frequency deviation | ±75KHz |
| Deviation linearity in all freq. range | ±5KHz |
| RF output power | 2400 W ± 0.3dB - Adjustable |
| Internal Driver power | max 10W |
| Harmonics emission | <-70dBc* |

Modulation capability

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

MPX characteristics

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



*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

