

DVB-T/H TV amplifier

Description

The D50/D100/D200 is a full LD-MOS Broadcast Power Amplifier designed for both digital and analog application. The output stages are designed using exclusively LD-MOS technology, which ensures high basic linearity and stability of the amplifier characteristic. A built-in protective circuit safeguards the amplifiers against reflecton and overheating. The unit is the state of the art in terms of easy assembly, reliability and performances. The complete unit can assure the compliance to all relevant international standards. The D50/D100/D200 is built on single power amplifier modules of 50/100/200 W for DVB-T/H. All amplifiers are broadband in the 470 MHz to 862 MHz range. Both the power supply and the cooling system are integrated into the amplifiers, thus requiring no peripherals. This enables flexible instalation in a standard 19 -inch rack or even operation without any rack at all. With the D50/D100/D200, the customer can comfortably operate the amplifier with the color display and the buttons.



Key Features

- Full LD-MOS Power Amplifier
- 250/500/1000 Wps Analog Output
- 50/100/200 Wrms Out DVB-T
- BroadBand (470-862 Mhz)
- Easy maintenance without special tools
- Rs232 or RS485 interface
- Extremely strong mechanical structure
- Control software included

| | D 50 | D 100 | D 200 |
|----------------------------|--|---|---|
| Voltage supply | 220Vac +15% -30% | | |
| Power Consumption | 800W @250W Ps Black Field 400W @50W DVB-T | 1600W @500W Ps Black Field 1000W @100W DVB-T | 2800W @1000W Ps Black Field 1600W @200W DVB -T |
| Current Consumption | 3.6A max @ 220 V | 7.5A max,PF>0.97 analog | 12A max,PF>0.97 analog |
| Operating Temperature | 0 to +45 °C | | |
| Humidity | Up to 90% (non condensing) | | |
| Gain | 45dB ±1.5dB | | |
| Power Out (@1dB compress.) | Min. 330W (Typ. 380W) | Min. 600W (Typ. 700W) | Min. 1200W (Typ. 1400W) |
| Input Return Loss | Min. -16dB (Typ. -20dB) | | |
| Output Return Loss | Min. -18dB (Typ. -20dB) | Min. -18dB (Typ. -22dB) | |
| Pout Common Amplif. | 250W Ps IMD> -50dB Red Field | 550W Ps IMD> -47dB Red Field | 1000W Ps IMD> -47dB Red Field |

| | | | |
|------------|-------------------------------|-------------------------------|-------------------------------|
| Pout DVB-T | 50W RMS shoulder < - 33dBc | 100W RMS shoulder < -32dBc | 200W RMS shoulder < -32dBc |
| Pout PEP | 400W IMD <-27 dBc | 700W IMD <-27 dBc | 1400W IMD <-27 dBc |
| Dimensions | 19" 3HU std 400mm dep. | 19" 3HU std 600mm dep. | |
| Weight | 15kg | 21kg | 24kg |
| RF in | N connector rear panel | | |
| RF out | N conn. front panel | 7/16" connector front panel | |
| RF mon | BNC con. rear panel | SMA connector rear panel | |
| RS232 | D 9 poles rear panel | | |
| RS485 | Data socket rear panel | | |

TV Broadcast Power Amplifier | DVB TV

http://dvb-tv-product.at-communication.com/en/at/tv_broadcast_power_amplifier_dvb.html