

## Standalone MMDS-Band Medium Power Amplifier

Model: DMPA 2600

### Product Features

- 2500 MHz - 2700 MHz Broadband Amplifier
- High linearity PA provides 50 Watt output for broadcast of digital waveforms
- Multiple COFDM channel support
- Fully protected against input overdrive, temperature and output load VSWR conditions
- Remote control and self monitoring via RS485 interface
- HPA Monitor GUI software available for local PC control via RS232 interface (CD included)
- Integrated AC/DC power supply



### Product Description

The DMPA 2600 is designed to operate as a final amplification stage for a terrestrial MMDS-Band transmitter or repeater system. It amplifies an input MMDS-Band signal to a digital average output power level of 50 Watts, while maintaining its linear characteristics.

The DMPA 2600 architecture is based on a solid state design operating in Class A/AB linear mode over a frequency range of 2500 MHz to 2700 MHz. The amplifier is fully protected against input overdrive, overheating and output load VSWR conditions. The protection circuits are all self correction, allowing the amplifier to be restored to its normal operating state upon removal of the fault condition.

The DMPA 2600 incorporates an internal automatic self leveling loop to maintain constant gain over the life of the equipment. The automatic gain control circuit will compensate for gain variations caused by changes in temperature and device aging. Depending on the application, the amplifier could be configured to operate in ALC mode, maintaining a constant output power level.

The amplifier's operational parameters are monitored and controlled by an embedded system controller that can be accessed from the RS232 interface using the GUI software provided.

The DMPA 2600 is a field replaceable system component that includes an integrated AC/DC power supply and is designed for indoor installation.

All of the amplifier's components are enclosed in a standard 19" rack mount chassis, occupying only "2RU" of cabinet space.

The amplifier is forced air cooled using four high performance fans, which are installed on the amplifier enclosure front panel.

# Standalone MMDS-Band Medium Power Amplifier

Model: DMPA 2600

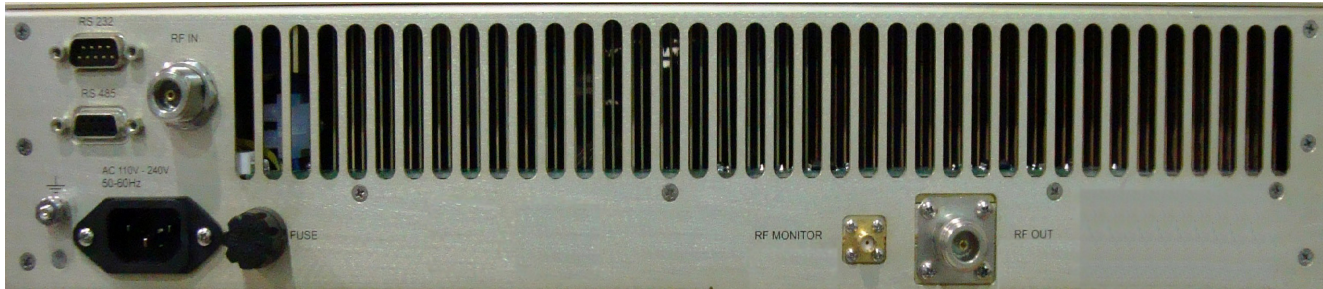


Fig.1 - Rear Panel

## Product Specifications (specifications are subject to change without notice)

### Parameters

<b>Operating Frequency Range</b>	2500 MHz - 2700 MHz
<b>Digital Average Output Power</b>	50 Watts
<b>Gain</b>	55 dB typical
<b>Gain Variation over Temperature</b>	≤ ±1 dB
<b>Gain Variation over 8 MHz BW</b>	≤ 0.5 dB
<b>In-band IMD</b>	≤ -30 dBc
<b>Spectral Regrowth (uncorrected)</b>	≤ -35 dBc (at rated output power) (a minimum 5 dB improvement can be seen with Pre-correction applied)
<b>RF Input VSWR</b>	1.50 : 1
<b>Instantaneous Bandwidth</b>	Up to 50 MHz

### Interfaces

<b>RF Input Connector</b>	N-type (F), 50 Ω
<b>RF Output Connector</b>	N-type (F), 50 Ω
<b>RF Monitor Connector</b>	SMA (F), 50 Ω
<b>Control Interface</b>	RS232: DB9 (M) - HPA GUI local control RS485: DB9 (F) - remote control

### Power Supply

<b>Voltage</b>	100 - 240 VAC
<b>Frequency</b>	50 - 60 Hz
<b>Power Consumption</b>	max. 800 Watts (at rated output power)

### Mechanical

<b>Size</b>	2 U of 19" wide cabinet
<b>Dimensions (W x H x D)</b>	483mm x 89mm x 527mm (19.0" x 3.5" x 20.75")
<b>Weight</b>	21 kg (46 lbs.)

### Environmental

<b>Operating Temperature</b>	-10°C to +45°C (+14°F to +113°F)
<b>Storage Temperature</b>	-40°C to +70°C (-40°F to +158°F)
<b>Relative Humidity</b>	max. 95%, non condensing
<b>Cooling</b>	Forced air