

RF Broad-Band Power Amplifier

THLV-100-MV, UHF RF Amplifier for mast mounting

This amplifier can be mounted directly on the antenna mast (mounting kit included) and is designed for all-weather outdoor use. The advantage of this amplifier as an alternative to 19" or desktop units near the control ground station is that it avoids unnecessary power losses in the feed line to the antenna, which should normally be mounted on a mast (height 9 to 20 m). Here the low control power from a control transmitter may be fed to a Ground station control unit, adapted to the line length, converted into the necessary RF power e.g. up to 100W, others on request) and fed directly to the transmitting antenna via a negligibly short RF cable. This means that the full RF power is available directly at the antenna and that not, for example, 50% of the power is converted into heat in a cable with a feed length of 20 m or more. The mast amplifier is connected via a weatherproof CAT5 cable to the control unit and a feeder cable with a suitable cross-section as well as the RF cable to supply the RF control power. When using this alternative, the control unit (pos. 1) can easily be located up to 50m away from the antenna.

Output power of the RF amplifier can be set via the available USB interface and the supplied GUI program, in the same way as at our ground station amplifier, and the output power may be displayed on the front panel of our ground station control unit



- ruggedized for all year outdoor use
- IP68 water, dust protected, solid state manufacturing
- Amplifier with excellent linearity
- high spectral purity
- compact design
- light weight
- protection circuits against load mismatch, overdrive, overheat and overload
- several options on request

*Picture shows amplifier without heat sink cover
Fan protected against pollution and bucks*

Frequency range:	395 – 450 MHz
Bandwidth:	60 MHz or less on request
Output power:	100 W CW, others on request
Input power:	1 Watt to 3 Watt
Ripple:	± 1 dB or (0,5dB)
Harmonics:	- 60 dBc min.
Para waves:	- 60 dBc @ 1 Ton rejection
System impedance:	50 Ohm
Max. load VSWR:	1:4,0 incl. Isolator
Supply voltage:	14 V/DC supplied from control station
Activation period:	100%
Environmental temperature:	-30°C bis +65°C
Weight:	about 3 kg
Dimensions:	260 x 160 x 140 mm (B x H x T) without connectors
Connections:	N for RF input/output, Cat5 socket for control, water protected Hirschmann for supply
Conformity:	06/95/EC, 2004/108/EC and 99/5/EC: EN 301 783-1 V1.1.1 (2000-09), EN 301 783-2 V1.1.1 (2000-09) EN 301 489-1 V1.6.1 (2005-09), EN 301 489-15 V1.2.1 (2002-08) EN 60950-1: 2006