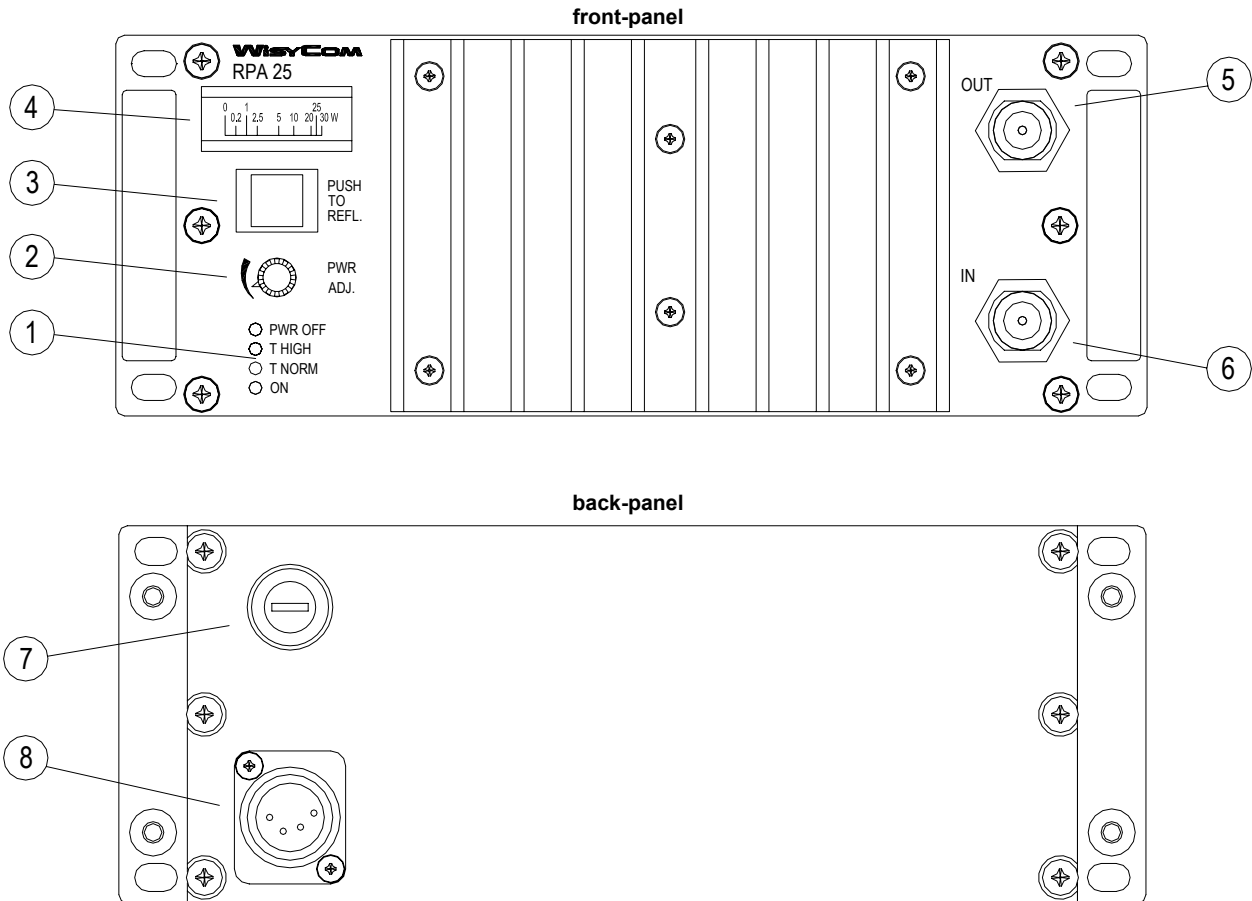


**OB-VAN RADIO-LINK SYSTEMS**  
**RPA 25 - 30 W POWER AMPLIFIER (1/2 x 19"/2U standard-rack)**



- 1) **SIGNALLING LED's:**
  - ⇒ **ON** (green LED) the apparatus is correct working
  - ⇒ **T NORM** (yellow LED) the temperature is < 50 °C
  - ⇒ **T HIGH** (yellow LED) the temperature is > 55 °C
  - ⇒ **PWR OFF** (red LED) the temperature is > 60 °C (the amplifier is shut-off)
  - ⇒ **FUSE OFF** (red LED) the back-panel fuse is burned.
- 2) **ADJUSTMENT: OUTPUT-POWER.**
- 3) **PUSH-BUTTON: REFLECTED-POWER MEASURING.**
- 4) **METER: OUTPUT-POWER / REFLECTED-POWER.**
- 5) **CONNECTOR: OUTPUT-POWER (N-F type).**
- 6) **CONNECTOR: INPUT-POWER (N-F type).**
- 7) **FUSE: DC-POWERING (10 A)**
- 8) **CONNECTOR; DC-POWERING INPUT (XLR4-M type) [ +V = pins 2 + 4; -V and ground = pins 1 + 3 ].**

**OB-VAN RADIO-LINK SYSTEMS****RPA 25 - 30 W POWER AMPLIFIER****DESCRIPTION:**

The RPA25 Power Amplifier is very compact and, in spite of its small size, it features appreciated and unique characteristics.

Its inherent noise is extremely low and thanks to the very sharp **output low-pass filter**, also the amplified noise eventually generated by the exciting transmitter is kept to a minimum.

The RPA25 allows to operate also with output mismatching: in case of bad antenna- or cable-impedance characteristics, the amplifier is not shut-off (as the most part of less-performing amplifiers) but instead the reflected-power coming from the antenna is redirected, by the built-in **output-isolator**, to its internal dummy-load. This prevents the overloading of the final power-stage and in this way even any intermodulation product and/or noise generation are avoided.

The amplifier output-power can be read in the **front-panel meter** and can be adjusted by the **front-panel knob (PWR ADJ.)**. Pushing the red button (**PUSH TO REFL**), you can read on the meter the antenna reflected-power.

The RPA25 features accurate **temperature measuring and surveillance**.

Four LED's indicate: correct working (< 50 °C, **ON**), acceptable working temperature (+50 ÷ +55 °C, **T NORM**), high working temperature (+55 ÷ +60 °C, **T HIGH**), and over-heating (> +60 °C, **PWR OFF**).

In this last case the amplifier is automatically shut-off (until it cools-off) to prevent scorching of the operator.

The apparatus can be powered by a wide range of DC powering-voltages, without reducing performances, thanks to the built-in very high-efficiency **Dc/Dc power converter**.

In the back-panel are located the feeding connector and the relevant fuse; in case the fuse breaks, the relevant LED in the front-panel (**FUSE OFF**) turns-on.

**TECHNICAL DATA:**

Frequency range	:	the RPA 25 can be supplied for one of the following ranges: ⇒ 170 ÷ 250 MHz (BW > 12 MHz) ⇒ 305 ÷ 360 MHz (BW > 12 MHz) ⇒ 470 ÷ 880 MHz (BW > 25 MHz). ⇒ others on request.
Input power	:	1.7 ÷ 3.5 W.
Output power	:	20 ÷ 35 W [ @ Power-in = 2W ], adjustable by front-panel knob.
Harmonics	:	< -80 dBc (typ. -85 dBc).
In / Out impedance	:	50 Ohm.
Input VSWR	:	< 1.2 : 1.
Power source	:	10 ÷ 20 Vdc, negative ground.
Power consumption [ @13V ]	:	approx. 4.5 A [ @ Power-out = 25 W ].
Size	:	243 x 87 mm (½ x 19"/2U standard-rack) x 230 mm depth.
Weight	:	4.5 kg approx.

Subject to change without notice

