



PA 100

Universal feeding bridge

For easy set-up, testing and measurement of telephone terminals.

It is truly universal

The PA 100 universal feeding bridge makes it easy to set up, test and carry out measurements on telephone terminals, for DC currents (current / voltage templates), transmission (impedance, transmission level, etc.), numbering and response signals (signalling, carriers, etc), and all types of measurements used to characterise an analogue telephone terminal (reception of charge pulses, reversed polarity, etc).

- The power supply operates in voltage or current mode.
- Loop current detection can be adjusted with precision and can, by using adjustable time delays, trigger several events: reversed polarity, utility contacts, control of a ringing generator.
- The internal components of the R, L, C bridge can be switched to external components for specific measurements.
- A built-in floating voltmeter can be used to measure the voltage across the inputs/outputs of a terminal, for example.

It makes your work easier

Thanks to powerful ergonomics, all of the configuration settings can be accessed quickly. The most useful configurations can be stored in the memory and called back instantly.

The PA 100 universal feeding bridge :

- Simplifies your test set-ups. You no longer need to use two or three heavy and cumbersome devices, and you don't have to check the connections of your set-up: the PA100 is ready to use!
- Fully micro-computer controlled. With the optional Pilot'SimCom® telephony-dedicated workshop, you easily create scenarios that you can execute as many times as you like, with traceability and rigour to suit your quality procedures.

It is essential

To design, tune and test the following aspects of any telephone terminal :

- Compliance with the standards of the intended place of use.
- Current / voltage characteristics.
- Impedances.
- Output levels (numbering, carrier, identification signal, etc.).
- Sensitivity to various signals (carrier, tone, remote control, charging, etc.).
- Behaviour in the presence of power supply variations (voltage, current, reversed polarity, etc.).

Technical specifications

- **Battery voltage** : 0 to 120V in steps of 0.1V. Precision $\pm 0.1V$.
- **Current limitation** : 0 to 120mA in steps of 0.1mA. Precision $\pm 0.4mA$.
- **Line current measurement** : 0 to 120 mA in steps of 0.1mA. Precision $\pm 0.4mA$.
- **Voltage measurement** : two automatic ranges
0 to 40V. Resolution 0.02V. Precision $\pm 0.1V$.
0 to 200V. Resolution 0.1V. Precision $\pm 0.5V$.
- **Line pick-up detection** : Detection threshold 0.1 to 100mA in steps of 0.1 mA. Precision $\pm 0.2mA$. Non-detection threshold 0.1 to 99mA in steps of 0.1mA. Precision $\pm 0.2mA$.
- **Events controllable by detection of line pick-up** : Dry contact, utility contacts, reversed polarity (see below). Each event is delayed individually, with a delay adjustable between 0 and 65,000ms. Precision $\pm 1ms$.
- **Line pick-up detection dry contact** : systematically controlled with detection of line pick-up (including delay). Immediate release by non-detection.
- **Utility contacts 1 and 2** : Switches controlled by detection of the of line pick-up (including delay) or by the control panel of the front face (immediate). Each utility contact is processed independently with the following parameters:
Ton : from 0 to 65,000ms in steps of 1ms. Precision $\pm 1ms$.
Toff : from 0 to 65,000ms in steps of 1ms. Precision $\pm 1ms$.
N : 1 to 999.
- **Reversed polarity** : controlled by detection of the of line pick-up (including delay), or by an external contact (including delay) or by the control panel of the front face (immediate). The switch-over passes through a "0 Wait state" (0Ws) which is programmable between 0 and 65,000ms in steps of 1ms. Precision $\pm 1ms$.
- **Measurement (or line) resistance** : 0 to 20,000 Ω $\pm 5\%$ $\pm 1\Omega$, in steps of 5 Ω , or external resistance.
- **Modulation blocking choke** : 2 independent chokes which accept 100mA DC. Values of 0H, 2H, 5H $\pm 10\%$ (100Hz - 4000Hz) or external choke.
- **Modulation injection / reception capacitors** : 9.4 μF $\pm 10\%$ / 400V or external capacitors.
- **Burst mode** : N = 1 to 99.
- **Configuration memories** : 9 (EEPROM).
- **Serial link** : RS232C. USB available as an option.
- **Power supply** : 230V $\pm 10\%$ (115/230V - Option B).
- **Temperature range**: operation at 5 to 40 °C.
- **Dimensions** (L x W x D): 350 x 250 x 85 mm.
- **Weight** : 4 kg approx.