

DC VOLTAGE AND CURRENT POWER SUPPLY

▶ **PTE-20-FA**



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PTE-20-FA



DC voltage and current power supply

DESCRIPTION

The DC power supply, PTE-20-FA, is designed mainly as an complementary equipment for the PTE Range, although the unit can operate independently as a stand-alone unit.

The equipment has an electronic output, microprocessor based, with stable, pre-selected outputs, that can generate voltage or current. There are various output ranges, with the adequate power for its application.

APPLICATIONS

BATTERY SIMULATOR: The DC power supply can be used as an auxiliary DC supply for testing relays. Because of the high power output (150W) the unit can be used to supply all the relays in an entire switchboard.

TESTING SEAL-IN UNITS: Using the equipment in the current mode, enables to test the protective relay seal-in units, in terms of the required current for their operation. Furthermore, because the unit has an external timer output synchronized to the output control, allows to test the time response in these units.

TESTING DC RELAYS: The maximum and/or minimum DC voltage relays used to control the voltage level in batteries, can be tested both in value and time response with the PTE-20-FA in the voltage mode.

Using the unit in the current mode enables to test in the same way the maximum and/or minimum DC current relays.

STANDARD ACCESSORIES

- 1 instruction manual.
- 1 voltage supply cable, 2 m. length.
- 2 test leads, extra flexible, 2 m length, 1.5 mm² section, 4 mm banana type connection.
- 4 clips for the above mention leads.
- 1 RS-232 cable.
- 1 BNC interconnection cable.
- 1 transport bag.

OUTPUT

VOLTAGE MODE

Range	I max	Accuracy	Resolution
0 - 25 V	6 A	±0,5% Rd	0.01 V
0 - 50 V	3 A	±1 dig.	0.01 V
0 - 150 V	1 A	10% - 100% Fs	0.1 V
0 - 300 V	0,5 A	15° - 35° C	0.1 V

Line Reg. <1 mV/V

Load Reg. <0,04% Fs/A

Ripple and noise <100 mVpp

I max duty cycle: Vo > 60 % FS Continuous
Vo <= 60 % FS 5' on / 20' off

CURRENT MODE

Range	V max	Accuracy	Resolution
0 - 0,5 A	300 V	±0,5% Rd	0.001 A
0 - 1 A	150 V	±1 dig.	0.001 A
0 - 3 A	50 V	10% - 100% Fs	0.001 A
0 - 6 A	25 V	15° - 35° C	0.001 A

Line Reg. <2 µA/V

Load Reg. <0,45 · 10-3 % Fs/A

Ripple and noise <6 mApp

V min duty cycle: Io < 30% Fs -> Continuous
Io >= 30% Fs -> 5' On / 20' Off

START CHRONO OUTPUT

Type: Voltage free (dry contact)

Maximum AC Voltage: ± 30 V

Maximum DC Voltage: ±0.5 A

GENERAL

Control:	Manual / Automatic by PC and PTE-12 Option
Voltage supply:	230 Vac ± 10% 50 - 60 Hz 115 Vac ± 10% 50 - 60 Hz
Working range:	0 - 45° C
Case:	Aluminium, IP-65 protection
Dimensions:	Height: 200 mm. - 8" / Width: 300 mm. - 12" / Depth: 200 mm. - 8"
Weight:	13 Kg. - 30 lb.
Adjustment:	By PTE-CAL software, included

FEATURES

POWER OUTPUT: DC voltage between 0.01V and 300.0V or DC current between 0.001A and 6.000A can be selected. The unit also has dynamic capability, which means that the output value can be change dynamically to a 2nd value when pre-selected.

BUS PTE: Allows the interconnection with any other units in the PTE Range, with easier access to the references, controls, etc.

EXTERNAL TIMER CONTROL OUTPUT: This output is used to start an external timer, and delivers a pulse signal, dry contact type, of a 20ms duration. This signal is produced each time the power output changes its status ON/OFF or when the "Step Key" (change to a 2nd value) is activated.

OUTPUT PROTECTION: The outputs and the unit are electronically protected against overload, short-circuit, and over heating. These alarms are indicated on the front panel. Standard 5 x 20 mm fuses protect the rest of the inputs.

SELECTION INDICATORS: The selected values are shown with a 4-digit LED display.

SELECTION SYSTEM: The selected output value is achieved by a multiturning step, by step rotating selector, with and adjustable resolution of: 1/10/100 digits.

ACCURACY: The accuracy of the selected output values is 0.5% (typical) and 1% minimum, of the selected value from 10% to 100% of the range.

CHARACTERISTICS

- Voltage or Current output up to 300V or 6A respectively.
- Power output: 150W.
- Single phase voltage supply.
- Manual or computer control.
- Dynamic test capability.
- RS-232 serial port.
- Closed case calibration.
- IP-65 container.
- Portable.

DISTRIBUTED BY:

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