

ZT-30 TRANSMITTER

Battery-Powered EM / Resistivity Transmitter



DESCRIPTION

The ZT-30 is a battery-powered transmitter capable of producing time-domain or frequency-domain waveforms into either resistive or inductive loads. As a TEM transmitter, the ZT-30 can deliver up to 30A into a 100m loop with a turnoff time of less than 200 μ s. Because the ZT-30 also performs well while transmitting into resistive loads, some customers are using it as a low-power resistivity transmitter. When used for resistivity, it is necessary to monitor the current since the transmitter does not have current regulation circuitry.

FEATURES

- Bipolar current output up to 30 A
- 50 or 100% duty cycle
- 1 microsecond turnoff into resistive load
- Lightweight, battery powered
- Less than 150 microseconds turnoff into a 100-meter loop at 20 amperes

SPECIFICATIONS FOR THE ZT-30 TEM TRANSMITTER

Mechanical

Case size: 45 x 18 x 28 cm
(17.7 x 7.1 x 11.0 in)
Weight: 8 kg (17.6 lb) (without batteries)

Electrical

Input voltage: 14 to 136 Vdc (400 Vdc selectable)
Peak output current: 30 A unregulated
Transmit control by GDP receiver or XMT-series
Transmitter controller
($DC \leq f \leq 32$ Hz TD, $DC \leq f \leq 512$ Hz FD)
Isolated current monitor output
Automatic over current shutdown (set for 33 A)
IGBT power output current switch
Power contactor to remove voltage from transmitter
during fault conditions
Lamps to indicate state of transmitter: power on,
transmitting, fault, and polarity
Fan-cooled heatsink

Controls & Displays

Power on / off
Transmit / Reset
Damping Select
Meter Select
LCD Displays:
Input voltage
Internal battery voltage
Output current
Turnoff time
Heat sink temperature

Fault Indicators

Over / Under Voltage
Over Current
Over Temperature

Output Jacks

Current monitor terminals, isolated output 50 mV/A
or 1 V/A ranges
Output current terminals

Power

Internal battery: 10.9 to 14V, Logic Power Main
Power connector: four-pin military twist-lock, 14 –
400 Vdc

Applications

TEM transmitter, 136 Vdc max @ 30 amps
Low current transmitter for TD & FD Resistivity/IP,
400 Vdc max @ 7 amps

Options

ZPB-600 400 Vdc Power Booster