

ZT-30 TRANSMITTER

Battery-Powered EM / Resistivity Transmitter

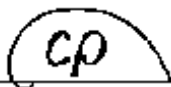


DESCRIPTION

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
- Less than 150 microseconds turnoff into a 100 meter loop at 20 amperes
- Lightweight, battery powered



Zonge Engineering and Research Organization, Inc.

Specialists in Electrical Geophysics

• Field Surveys • Geophysical Consulting • Instrumentation Sales and Lease •

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 overcurrent 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, 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
100 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

*Specifications subject to change without notice
© Copyright 2001, Zonge Engineering & Research Organization, Inc.*



Zonge Engineering and Research Organization, Inc.

Offices:

Arizona, Alaska, Nevada, Colorado and Minnesota

Headquarters:

3322 E. Ft. Lowell Road, Tucson, AZ 85716, USA (800) 523-9913
Tel: (520) 327-5501 Email: zonge@zonge.com
Fax: (520) 325-1588 Web: <http://www.zonge.com>