

# ZT-30 Geophysical Transmitter

*Battery-Powered EM / Resistivity Transmitter*



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  $\mu$ 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

# 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

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