

THE GGT-30 TRANSMITTER

High Power and Fast Turn-off



FEATURES

- Constant current supply
- Used for time/frequency domain IP, Resistivity, CR, TEM, FEM, CSAMT
- Broad-band: DC to 8 kHz (standard)
- Output up to 1000 V, 45 A
- Fast turn-off time: 125 μ sec (300 x 300 m loop)
- Drives a loop or grounded dipole
- Efficient, modular design
- Rugged design reliable in all climates



Zonge Engineering and Research Organization, Inc.

Specialists in Electrical Geophysics

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

SPECIFICATIONS FOR THE GGT-30 TRANSMITTER

General

Description: Broadband, constant-current, time and frequency domain, high-power geophysical transmitter
Enclosure: Welded, hardened aluminum frame with removable side panels, non-conducting paint
Size: 78 x 46 x 45 cm (31 x 18 x 18 in)
Weight: 93 kg (205 lb)
Operating temperature: -40° to +55°C (-40° to +130°F)
Operating humidity: 0 to 90%, non-condensing

Electrical Characteristics

Drives a loop or grounded dipole
Turnoff time: Under 10 μ sec for a resistive load; 125 μ sec for a 300 x 300 m loop (16 ohms resistance, full current)
Maximum input: 30KVA @ 30°C
Output voltage range: 50 to 1000V
Output current range: 0.2 to 45A
Current stability: $\pm 0.2\%$
Frequency range: DC to 8 kHz

Switching Control

Switching controlled by external device
Recommended transmitter controller:
Zonge XMT-32
Waveform type: Capable of virtually any type of pulse waveform, limited by external controller device

Controls

Power ON / OFF
Transmit / Reset switch
Current adjust pot, continuously adjustable, locking
Voltage range switch (50-250V, 200-500V, 450-750V, 700-1000V)
Loop / Dipole select switch

Displays

Analog input voltage meter, 0-150 V
Analog output voltage meter, 0-1000 V
Power On / Off lamp, transmit lamp, output lamp
Selectable LCD meter:
Output current ($\pm 0.01A$)
Input power (0-30 KW)
Transformer temperature
Loop turnoff time (microseconds)
Indicator lamps: control power on, transmit on, transmit polarity
Fault indicator lamps: output and input overcurrent, output and input overvoltage, end of regulation, alternator overvoltage, open circuit

Output Jacks

Current calibrate terminals (50 mV/A)
Output current terminals
Grounding jack

Power

Three-phase, 120 VAC, 400 Hz
Recommended motor generator set:
Zonge ZMG-30
Power connector: four-pin military screw-type with locking ring

Options

Spare parts kit (standard and extended kits available)
LCD heater for temperatures below -15°C (+5°F)
Current monitor isoamp module
Resistor load bank
Switch box for rapid switching of dipole pairs

Specifications subject to change without notice
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