

THE GGT-10 TRANSMITTER

Versatile, Medium Power



Desert Bloom 1998 Picacho Peak AZ

FEATURES

- Constant current supply
- Used for time/frequency domain IP, Resistivity, CR, TEM, CSAMT
- Broadband: DC to 8 kHz (standard)
- Outputs up to 1000 V, 20A (Optional 30A)
- 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
- Optional internal time base

Zonge Engineering and Research Organization, Inc.

Specialists in Electrical Geophysics • Field Surveys • Geophysical Consulting • Instrumentation Sales and Lease

SPECIFICATIONS FOR THE GGT-10 TRANSMITTER

General

Description: Broadband, constant-current, time and frequency domain, medium power geophysical transmitter
Enclosure: Welded, hardened aluminum frame inserted in a high impact fiberglass case
Size: 53 x 51 x 37 cm (21 x 20 x 14.5 in)
Weight: 51 kg (113 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 µsec for a resistive load; 125 µsec for a 300 x 300 m loop (16 ohms resistance, full current)
Maximum input: 10KVA @ 30°C
Output voltage range: 50 to 1000 V
Output current range: 0.2 to 20A (Optional 30A)
Current stability: ±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, 700-1000 V)
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
LCD:
 Output current (±0.01A)
 Input power (0-30KW)
 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-7.5
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
Internal timing board for specified IP-range frequencies
30 amp output

*Specifications subject to change without notice
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POWER SYSTEMS FOR GEOPHYSICAL TRANSMITTERS

Rugged Custom-Designed Motor/Generators



BMG-3



ZMG-30



ZMG-3



ZMG-10



ZMG-7.5

FEATURES

- Five power systems, from portable 3 kW to trailer-mounted 30 kW
- Exceptionally rugged and field-proven
- Power systems drive Zonge Engineering and other transmitter

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SPECIFICATIONS FOR THE MOTOR/GENERATOR SETS

	BMG-3	ZMG-3	ZMG7.5	ZMG-10	ZMG-30
Engine					
Cyl/cycle	114	114	2/4	2/4	4/4
Power (hp @ rpm)	5 @ 3600	8 @ 3600	18 @ 3600	22 @ 3150	62 @ 2400
Fuel	Regular/unleaded				
Starter	Manual	Manual	Electric	Electric	Electric
Alternator					
Output (kva)	2.5	2.5	9	32	32
Type	120/208 VAC/400 Hz/3-phase				
Base Frame					
Construction	Aluminum	Aluminum	Aluminum	Steel	Steel
Size (cm) ¹	19x34	36x46	46x792	69x94	91x137
Assembled Unit					
Power (kva)	2.5	2.5	7.5	10	30
Size (cm) ¹	36x46x71	51x71x51	46x79x56 ²	69x94x74	91x142x79
(in) ¹	14x18x28	20x28x20	18x31x22 ²	27x37x29	36x56x31
Weight (kg)	36	52	107	204	432
(lb)	78	114	235	450	950
Ship. Wt. (kg)	68	82	162	264	500
Ob)	150	180	355	580	1100
Fuel Supply	Internal	Internal	External	External	External
Power Cable	Included	Included	Included	Included	Included
Voltage Regulator	Included	Included	Included	Included	Included
Trailer-mounted ZMG sets					
Size (m) ¹	-	-	-	1.8x3.2x1.5	1.8x3.2x1.8
(ft) ¹	-	-	-	5.9x10.5x5.0	5.9x10.5x5.9
Wt. w/full tanks (kg)	-	-	-	794	998
(lb)	-	-	-	1750	2200
Options	Spare parts	Spare parts	Spare parts	Spare parts	Spare parts

1 All sizes specified in width x length x height

2 Mounted in a skid measuring 74x94x66 cm (29x37x26 in)



Zonge VR-1
Voltage Regulator
included with all
Motor/Generators

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