

Multi-X

Geophysical Current Source

- 50 Amperes (T-15)
- 60 Amperes (T-30)
- 1000 Volts
- The most versatile geophysical current source available for all electrical and electro-magnetic techniques

IP	Induced Polarization: Frequency and Time Domain, Phase and Spectral IP
CSAMT	Controlled Source Audio MT in scalar, vector, and tensor modes
TDEM, FDEM	All common Time and Frequency Domain Electromagnetics functions



T-30/T-15 Multipurpose Current Source

The most advanced controlled current source

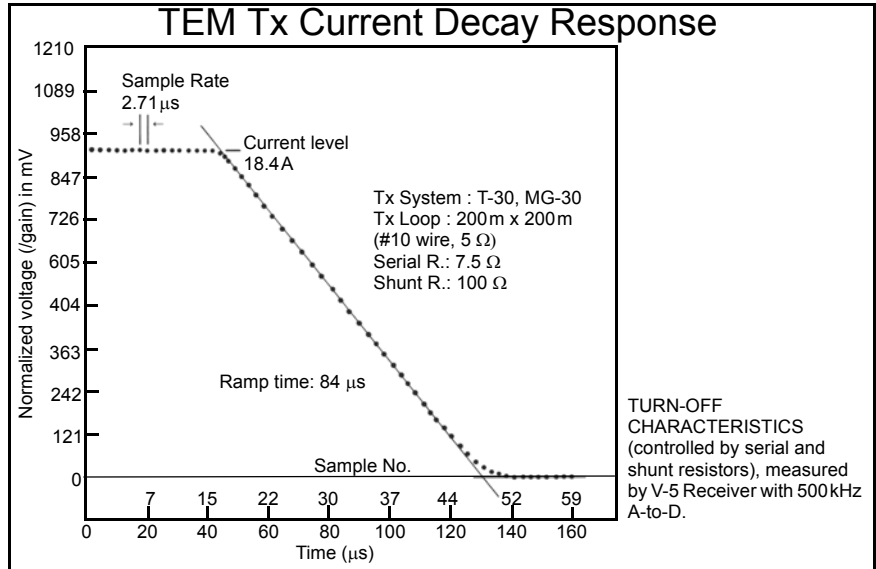
available for electrical methods exploration. It combines modern technology with thirty years of transmitter design experience.

The Multi-X is offered in two versions, identical in all aspects except for power and weight. The T-30 is the more powerful version (30 kW), while the T-15 is the lighter weight version.

These transmitters can be used for many geophysical techniques, including conventional Induced Polarity (IP) in the time, frequency or phase domains; true wide-band spectral IP; Controlled Source Audio Magnetotellurics (CSAMT) in scalar, vector, and tensor modes; Time Domain Electromagnetics (TDEM) and Frequency Domain Electromagnetics (FDEM).

The transmitter load can be either a grounded dipole or a loop, depending on the requirements of the application. The rapid controlled turn-off into inductive loads is suitable for TDEM applications.

A very wide range of standard binary-related timing options is provided, as



well as an input connection for an arbitrary external timing device.

These units also feature a variety of protective circuits, built-in receiver calibration circuitry, current monitor output for external deconvolution, constant current control, and semi-infinite impedance in the off-time when used for time-domain IP.

The standard power source for both units is the MG-30 motor generator. However, any suitable MG can be

used; it is not necessary to purchase the MG from Phoenix. (Consult us for guidance in the selection of another.)

Frequency: DC–8096 Hz

Volts: Maximum 1000 V

Current: Maximum 60 A

Weight: 75 kg (T-15); 90 kg (T-30)

Frequency stability: Better than 0.01% (internal timing)

Ramp turn-off time:

<100 μ s into 200m x 200m loop

MG-30

High performance motor generator—highest power-to-weight ratio, designed for portability.

This standard power supply for the T-15 and T-30 transmitters was developed especially for field use in rugged areas, combining moderate weight with high power from an automotive rotary engine. The MG-30 weighs only 400 kg, so it can be easily mounted on a small trailer or pickup truck, or even carried by helicopter where access is

especially difficult. Direct drive eliminates the inefficiency, alignment problems, and wear-and-tear associated with belt drives.

The 30 kW rating is conservative; the unit can be configured to a higher power when fitted with a suitable alternator.

Where light weight is not the most important factor, the MG-30 can be supplied with standard gasoline or diesel engines, in 60 or 400 Hz configurations and with output voltages of 100 V, 208 V, or higher if requested.



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PHOENIX Geophysics Limited

3781 Victoria Park Avenue, Unit 3
Toronto, ON, Canada M1W 3K5
www.phoenix-geophysics.com

Tel: +1 (416) 491-7340

Fax: +1 (416) 491-7378

E-mail: mail@phoenix-geophysics.com