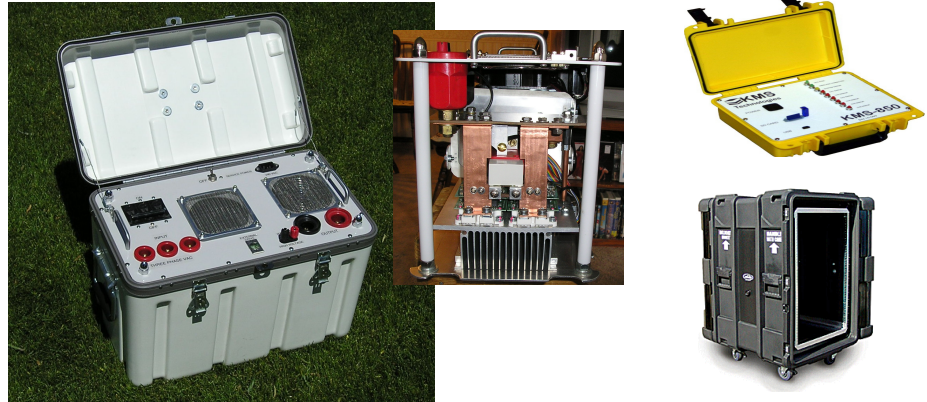


# Grounded dipole TEM transmitter



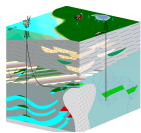
## KMS-5100 grounded dipole TEM transmitter

### KMS-5100 (100 kW)



KMS-5100 land EM transmitter in portable field box, inside view. Timing and system response controller, and optional shock mounted, dustproof case.

The KMS-5100 TEM land transmitter is developed to provide a controlled current source for geophysical exploration techniques including frequency domain (CSEM & CSAMT) Time Domain EM (LOTEM), and Time Domain Induced Polarization (IP).



## KMS Technologies

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## Product features

- Maximum power output: 100 kW, controlled with linear fast ramp.
- Works with almost any input voltage source
- GPS synchronized timing control for transmitter signal measurement.
- Long-range wireless for remote control and monitoring.
- Linear ramp better than 5  $\mu$ s turn off characteristic.
- Bi-polar reversing ramp time < 20  $\mu$ s
- Suitable for Time domain EM (TDEM or LOTEM), Induced polarization (IP) (time domain) etc. with target depth of 600 m and deeper.
- Ideal for deep EM geophysical applications (several kilometers)
- Ruggedized design for field operations (several units) or in one ruggedized transport case
- Suitable for variety methods, monitoring data on SD card. Unit includes KMS 810 or 820 as controller, cables and sensors.
- Transmitter operation procedures/schedules are downloaded through wireless/USB interface or pre-saved to the SD card.

<b>Current waveform</b>	<i>Reversing polarity square (100% duty cycle) or bipolar with off-time ( firmware selectable from 0.001 Hz to 100 Hz)</i>
<b>Transmitter type</b>	<i>Dipole source</i>
<b>Maximum output current</b>	<i>Tested 600 A reversing polarity. Depends on the grounded power voltage and resistance</i>
<b>Maximum output voltage</b>	<i>550 V</i>
<b>Input power</b>	<i>12 to 480 volts, A.C. or D.C. Single or 3-phase A.C., 50 – 60 Hz 100 Amps</i>
<b>Output waveform</b>	<i>Controlled by TTL driving signal (external or internal)</i>
<b>Switching frequency range</b>	<i>Up to 1 kHz</i>
<b>Output pulse width</b>	<i>10 ms to continuous</i>
<b>Maximum power output</b>	<i>100 kVA at 25° C</i>
<b>Output measurement</b>	<i>32-bit standard up to 4K Hz 24 bit (optional) sampling up to 100 KHz</i>
<b>Dimensions</b>	<i>KMS-5100: 0.49 m x 0.36 m x 0.39 m (L x W x D) (14U)</i>
<b>Operating environment</b>	<i>-20° C to 50° C -35° C to 50° C (storage)</i>
<b>Weight</b>	<i>KMS-5100: 18.82 kg</i>
<b>Duty cycle</b>	<i>100%, 75 %, 25%, 10%</i>
<b>Time/frequency domain operation</b>	<i>Front panel toggle switch to select internal or external time/frequency operation of 4 time periods: 5 sec, 10 sec, 15 sec, 20 sec</i>
<b>Synchronization</b>	<i>GPS ± 0.5 μs</i>
<b>User interface</b>	<i>Long range wireless, 802.11, USB</i>
<b>Heat sink temperature monitoring</b>	<i>Yes</i>
<b>Protection</b>	<i>Over temperature and current</i>
<b>Data storage</b>	<i>Data is saved to SD card</i>