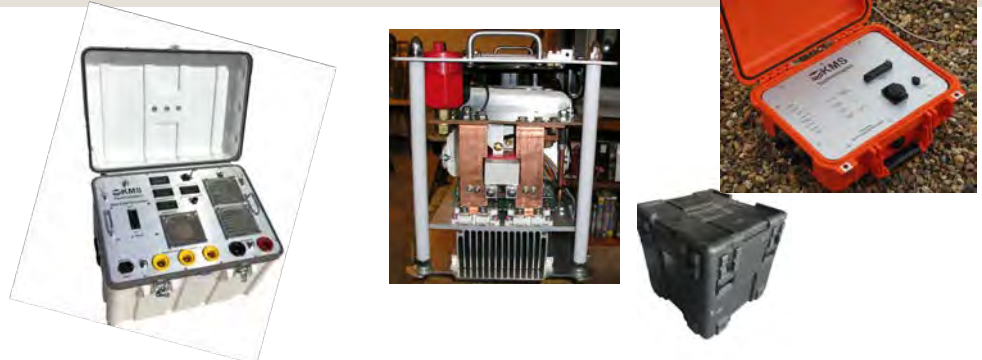


**KMS-5100 -- Options --  
100, 150 or 200 kVA**

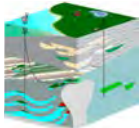
Custom options:  
500 kVA – for CCUS & EOR  
CSAMT/TFEM – 10, 40 kVA

## KMS-5100 (100, 150, 200 kVA)



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

The KMS-5100 electromagnetic (EM) land transmitter has been developed to provide a controlled current source for geophysical exploration techniques including Time Domain EM (LOTEM & TEM), Frequency domain and Time Domain Induced Polarization (IP) (including Time Frequency EM (TFEM) and Controlled Source AudioMagnetoTellurics (CSAMT)). This multi-function transmitter is ruggedized, portable, compact yet providing reliable maximum output power of 100, 150, or 200 kVA. (Custom 500 kVA and 10, 40 kVA)



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## Product features

- Maximum output: 100, 150 or 200 kVA; for CSAMT – 10, 40 kVA
- GPS synchronized timing control
- Long-range wireless for remote control & 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), TFEM, CSAMT, FSEM, etc.
- Target depth of 600 m or deeper (shallower for 10 kVA or custom)
- Ideal for deep EM geophysical applications 2-4 km
- Grounded dipole or loop source
- Integrated in KMS array system via KMS-820-T
- Controller has 6 analog (3 unassigned) & (unlimited) digital channels
- Ruggedized design for field operations
- Data is saved to SD card (16-32 GB) and send to CLOUD (optional)

# Product specifications



100 KVA

Test controller

transmitter

Current sensor



Loop source & alone



<b>Current waveform</b>	Reversing polarity square (100% duty cycle) or bipolar with off-time (firmware selectable from 0.001 Hz to 1000 Hz (8 kHz for CSAMT)). Other waveform can be generated by controller
<b>Transmitter type</b>	Dipole source or loop source
<b>Maximum output current</b>	Limited to 40 A unipolar, 80 A bi-polar (10 kVA version) Limited to 125 A unipolar, 250 A bi-polar (100 kVA version) Limited to 175 A unipolar, 350 A bi-polar (150 kVA version) Limited to 240 A unipolar, 480 A bi-polar (200 kVA version)
<b>Maximum output voltage</b>	following input
<b>Input voltage</b>	480 - 600 VAC at 50/60 Hz
<b>Frequency range</b>	0.001 - 1 kHz (CSAMT/TFEM to 8 kHz)
<b>Current recording sampling rate</b>	< 80 kHz, same as receiver acquisition sampling-rate
<b>Maximum power output</b>	100/150/200 kVA at 25° C
<b>Output measurement</b>	24 bit KMS-820 with KMS-831 up to 32-bit
<b>Dimensions</b>	KMS-5100-100: 0.7 m x 0.9 m x 1.01 m (W x H x D) (14U)
<b>Operating environment</b>	-20° C to 60° C -35° C to 60° C (storage)
<b>Weight</b>	KMS-5100: 30 kg (switchbox only), for 150 KVA = 90 kg and 200 KVA = 120 kg.
<b>Duty cycle</b>	100%, 50 %, 33%, 25%, variable
<b>User interface</b>	Long range wireless, 802.11, USB, cable or USB, CLOUD connection optional
<b>Standard packaging</b>	Unit in field container shipped in ruggedized large transport container

PICTURES: Initial prototype test; 100 kVA tested at 242 A; loop source (> 200 A); 150 kVA production model; 100 kVA production model in Colorado; 80 kVA in Texas, 3 phase 230 V version, 5100 in transport case.