



HIGH POWER

SkyTEM306HP

Detailed near surface and deep exploration

www.skytem.com



SkyTEM306HP

Next generation SkyTEM systems at a glance

The new generation of SkyTEM systems leverages:



A high power 250A transmitter featuring patented technology for faster current turn-on and turn-off.

The MultiMoment current waveform delivers both high resolution of shallow geology and large depth of investigation in one



A fully digital multichannel receiver for continuous sampled and streamed data with advanced and real-time signal gating and measured B-field. Enhanced features include extremely high accuracy due to a 5 MHz sample rate with 36-bit resolution in 3 channels and rejection of high-frequency noise.



The re-engineered receiver coil system offers a five-fold or more reduction in late time noise levels for greater resolution at depth.



Aerodynamically engineered rigid and lightweight carbon fibre carrier frame permits take-off with a full fuel tank maximizing production rates in hot climates and high elevations.



SkyTEM306HP for high-resolution exploration

From the start SkyTEM has succeeded in bringing advanced technologies to the airborne EM industry. Four years ago we set an ambitious goal - develop state-of-the-art helicopter transient electromagnetic (TEM) systems that offer a combination of improved survey economics with exceptional exploration capabilities. One of the achievements is a truly innovative technology - SkyTEM306HP (High Power). This system is engineered to collect MultiMoment data, delivering high-resolution near-surface data concurrently with a greatly improved depth of investigation. The system is aerodynamically superior to any TEM system and is available in FAST configuration that reduces acquisition costs by flying at production speeds of up to 150 km/h. From mineral exploration to challenging groundwater projects, SkyTEM306HP provides unprecedented subsurface detail at a low cost.

SkyTEM306HP benefits

High near-surface resolution and depth of investigation

The patented MultiMoment technology combined with the new 250A transmitter offers extraordinarily high near-surface resolution concurrently with greater depth of investigation.

Improved characterization of geology and conductors

The digital multi-channel receiver delivers measured B-field data for improved characterization of strong conductors. Adding to enhanced resolution of targets are the high sample rate of the new fully digital receiver and increased suppression of high-frequency noise sources such as VLF transmitters.

Make survey decisions in real-time during survey operations

One of SkyTEM's hallmarks is the unique ability to deliver preliminary data within 48 hours after collection for near real-time review of survey results and progress. Quick review of the data creates the opportunity to quickly reconfigure system parameters to maximize results in various geological settings.

Customization is achieved within a few hours. For example, the survey can start in FAST configuration for economics and later be reconfigured to conventional setup for highly detailed mapping of selected areas.

More economical

The SkyTEMFAST technology introduced in 2014 is arguably the most significant breakthrough in helicopter TEM technology in the last decade as it cuts acquisition time by up to half. SkyTEMFAST has acquired over 1,000 line kilometers of high resolution data in a single day. This is unprecedented in helicopter TEM history and delivers cost-efficiencies unlike any system on the market.

The lightweight carbon fibre frame and high power transmitter bring about further cost-efficiency benefits because even the highest-powered system (500,000 NIA and 1,000,000 NIA) can take-off with a full fuel tank.



Specifications of SkyTEM306HP

	LM MODE	HM MODE
No. of transmitter turns	1	6
Transmitter area per turn	342 m ²	342 m ²
Transmitter current	~9 Amp	220 - 250 Amp
Peak moment	~3,000 NIA	Up to 500,000 NIA
On time	800 us	5 ms
Off time	1018 us	15 ms
Repetition frequency	25 Hz	

