

Geotac300

PORTABLE MTSAT LRIT

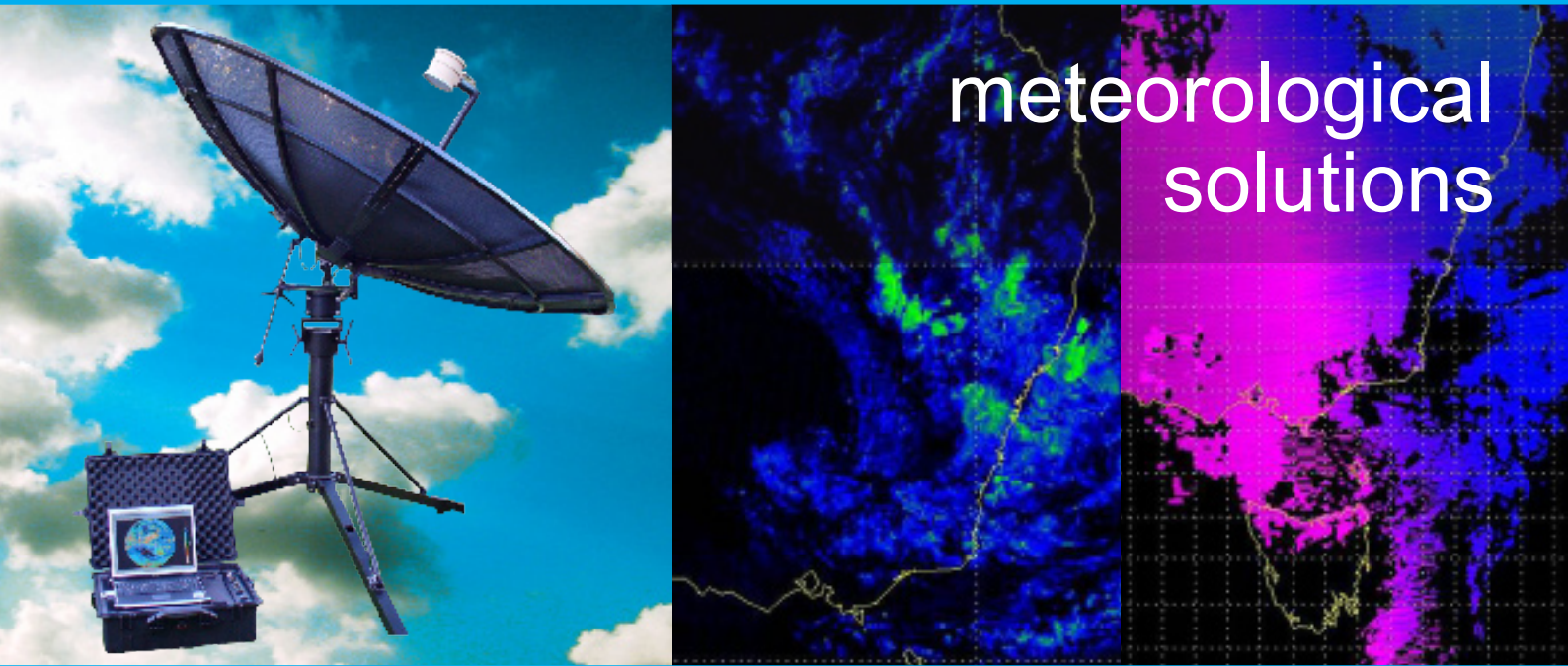
FEATURES

- Portable antenna with feed and downconverter
- Signal interface and processing unit
- Image display laptop computer, incorporating processing and ingest workstation
- Receiver
- Ingest and acquisition software
- METEOR LT image processing software
- Rugged carry cases

The GEOTAC300 satellite groundstation is a portable, high reliability, high-performance system designed to receive data from the Japan Meteorological Agency's MTSAT-1R spacecraft. It is a complete turn-key system, providing all hardware and software necessary to receive CCSDS transmissions from the spacecraft and process the data into image files.

The antenna and receiving equipment are easily transported in ruggedized cases, and can be quickly erected at remote locations.

REMOTE SENSING



The GEOTAC 300 satellite groundstation is a portable, reliable, high-performance, complete turn-key system.

The system consists of two sections: an antenna mount with feed and downconverter and a case mounted Signal Interface and Processing Unit (SIPU), which distributes power to all system components, accepts and demodulates the RF signal from the antenna and, via the inbuilt computer and software, display and analyze the received data.

Transit cases are provided to allow safe transportation of the complete system. The complete system can be assembled and made operational in less than 30 minutes.

TECHNICAL SPECIFICATIONS

ANTENNA

Type	Mesh, six petals
Diameter	2.3m
Alignment	Integrated signal level indicator

RECEIVER

Input Frequency	126 to 154 MHz
Input dynamic range	-90 to -50dBm
Input Impedance	50 ohms
Demodulation modes	BPSK, PSK
Support symbol rates	0.1 to 2.7 MSPS
Temperature (operating)	0 to 50 degrees C non-condensing
Interface	RS-232 9600 baud

FEEDER / LNA / DOWNCONVERTER

Noise Figure	0.8dB typical, 1.2 dB max
Input Center Frequency	1702.500 MHz
Output Center Frequency	137.500 MHz
Conversion gain	>45dB, 48dB typical
Input Impedance	50 ohms
Temperature (operating)	0 to 50 degrees C non-condensing

SYSTEM CONFIGURATION

