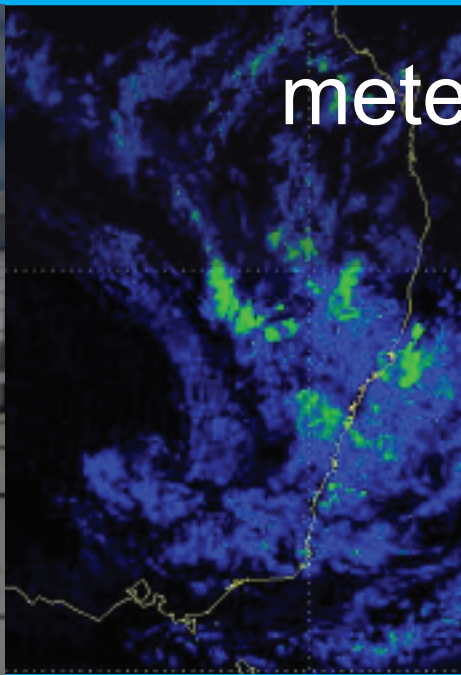# Geosat500

MTSAT HRIT & LRIT & FY2C SVISSR

FEATURES

- Complete turnkey system for use by forecasters with integrated reception & processing
- All MT-SAT modes & all channels received & processed
- Full range of forecasting tools with Dvorak technique, topography, overlays, zooming & panning
- Integration & display of multiple data sources inc. GRIB, Synops
- Level 2 products such as SST, cloud classification
- All common satellite formats such as HDF, NetCDF, Level 1B, PDS
- Intuitive easy-to-use interface

The ES&S GEOSAT500 groundstation is a high-performance system designed to receive data from the Japanese Meteorological Agency's MTSAT 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 MTSAT spacecraft is a geostationary satellite which produces detailed images of the earth for weather forecasting, cyclone tracking and research.

meteorological solutions

The GEOSAT 500 groundstation is a portable, reliable, high-performance, complete turn-key system.

This satellite transmits regular images of the earth, allowing forecasters to make weather predictions and follow the path of cyclones.

The GEOSAT500 MTSAT groundstation comprises a fixed parabolic dish, LNA, downconverter, and three or more computers:

Acquisition Workstation. Houses the receiver and pre-processes the raw data.

Data Processing Workstation. Receives pre-processed data from the Acquisition Workstation and produces final image products according to user-defined setups.

One or more Display Workstations. Each Display Workstation runs the ES&S METEOR product for the display and analysis of satellite imagery.

www.esands.com

MADE IN AUSTRALIA

ISO 9001 CERTIFIED

CERTIFIED QUALITY MANAGEMENT SYSTEM
ISO 9001
CERTIFICATION N° 14363

TECHNICAL SPECIFICATIONS

ANTENNA

Aperture	3.6/3.7m
3dB Beamwidth	3.6 Degrees
Antenna gain at 1.7GHz	34dB
Material	Aluminium
Coating	Polyester Powder Coating

DOWNCONVERTER

Noise Figure	1.2dB typical
Input center frequency	1691.000 MHz
Output center frequency	137.500 MHz
Conversion gain	>50dB, 52dB typical
Output impedance	50 ohms
Temperature (operating)	-40 to 60 degrees C

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

TYPICAL SATRAX-XL CONFIGURATION