GEOSAT500

MTSAT, HRIT, FY2C

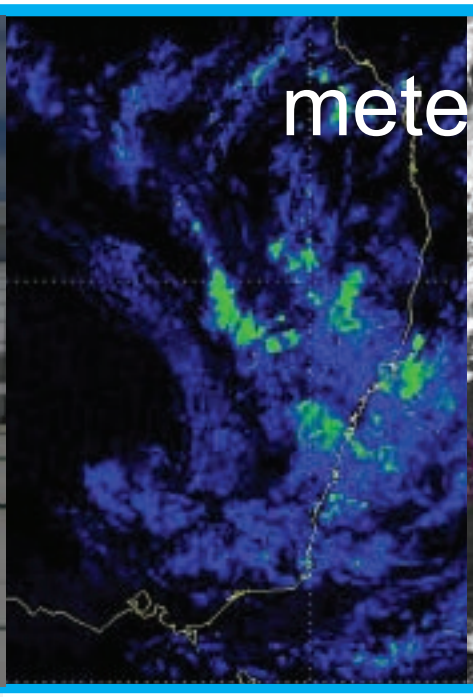
REMOTE SENSING

FEATURES

- Complete turnkey system
- Intuitive, easy to use interface
- All MTSAT modes and channels received and processed
- Integrated reception and processing
- Full range of forecasting tools including topography, overlays, zooming and panning
- Integration and display of multiple data sources including GRIB and SYNOP
- Tropical cyclone analysis using the Advanced Objective Dvorak Technique

The ES&S GEOSAT500 groundstation is a high-performance system that receives and processes downlinks from the Japanese Meteorological Agency's MTSAT spacecraft and/or the Chinese Meteorological Agency's Fengyun-2C satellite.

It is a complete turn-key system, providing all hardware and software necessary to receive transmissions and process the data into image files.



The GEOSAT 500 groundstation is a 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 workstations.

The GEOSAT500 can generate up to ten level-2 products from MTSAT HRIT data:

1. Cloud-top pressure;
2. Cloud-top height;
3. Cloud-top temperature;
4. Cloud type;
5. Cloud amount;
6. Sea-surface temperature;
7. Land-surface temperature;
8. Fire points;
9. Automatic Dvorak analysis; and
10. Cloud centre of rotation

MADE IN AUSTRALIA

ISO 9001 CERTIFIED

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TECHNICAL SPECIFICATIONS

GEOSAT500

ANTENNA

Aperture	3.6/3.7m
3dB Beamwidth	3.6 Degrees
Antenna gain at 1.7GHz	34dB
Material	Glass Fibre Reinforced Polyester SMC

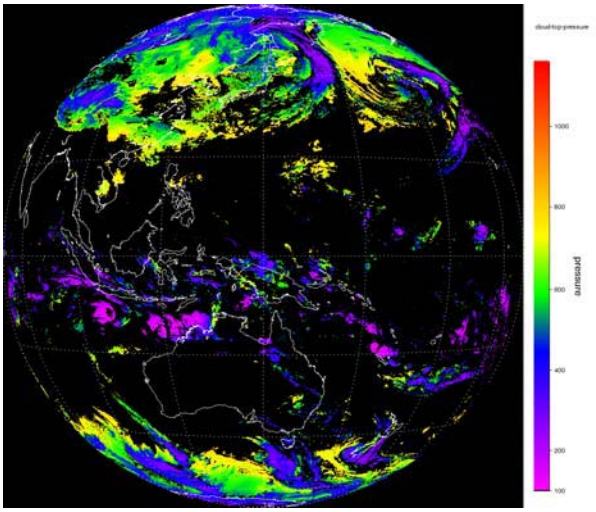
DOWNCONVERTER

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

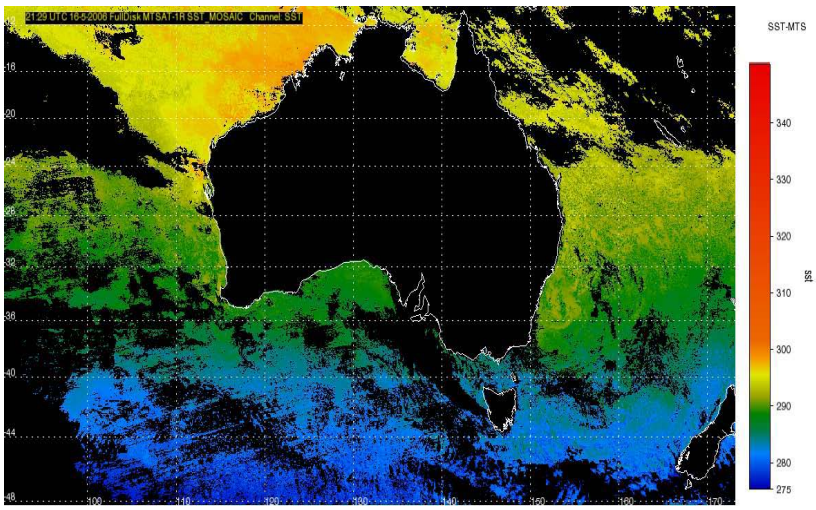
RECEIVER

Input Frequency	126 to 154 MHz
Input dynamic range	-90 to -50dBm
Input Impedance	50 ohms
Demodulation modes	QPSK, 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

Specifications above based on a typical GEOSAT500 groundstation. Configuration can be tailored to specific requirements.



Cloud Top Pressure (MTSAT)



Sea Surface Temperature (MTSAT MOSAIC)

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