

SATRAX700

MODIS-TERRA, AQUA

FEATURES

- High performance X-band reception
- XY tracking mount
- Flexible and upgradeable
- Fully automatic operation
- Robust design can be used without a radome
- Low demodulation loss
- Utilises the ESS3000 multi-mode receiver

The ES&S SATRAX700 groundstation is a high-performance system that tracks, receives and processes MODIS data from NASA's Terra and Aqua X-band satellites.

SATRAX700 is a complete turn-key system, providing all hardware and software necessary to receive transmissions and process the data into image files.

In addition, the system decommutates all other direct-broadcast instruments from the Aqua satellite and makes this data available on disk for further processing.

REMOTE SENSING



The SATRAX 700 X-band reception system is a reliable high-performance, fully automated system.

A fully automated system, the SATRAX700 earth station offers the latest in hardware and software technology for a wide variety of ocean, land, and atmosphere applications.

These applications include:

- Meteorology and Weather Forecasting
- Physical & Biological Oceanography
- Hydrology
- Fisheries
- Agriculture & Forestry
- Climate and Global Change Studies
- Land-based Change Detection Studies (e.g. urbanization, tropical deforestation, desertification)



SATRAX700 TECHNICAL SPECIFICATIONS

MOUNT

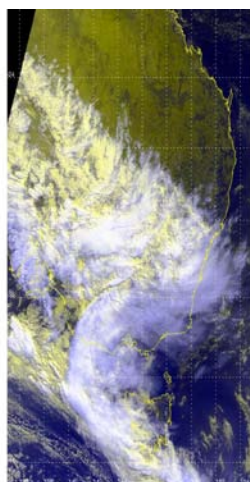
Mount configuration	X/Y
Antenna diameter	2.4m
Pointing accuracy	0.05 deg
Wind loading (operational)	120 km/hr
Wind loading (survival)	220 km/hr
Slew rate	> 5 deg/sec
Environmental	IP65
Mains supply	110/220/240 AC
Temperature range	-10 to 45 degrees C

FEED & LNA

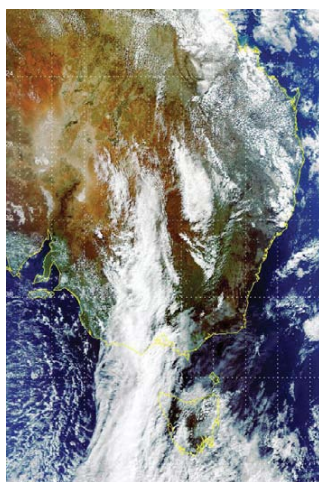
Gain	45dB
Noise Figure	45 deg K
Frequency	7750 - 8300 MHz
Polarization	RHCP
LNA Gain	45 dB
LNA NF	0.6 dB

ESS3000 MULTIMODE RECEIVER

Modes	QPSK, BPSK, PSK, OQPSK
Demodulation	fully digital (FPGA)
Configuration	file download
Internal OS	Linux
Data rates	0.5Mbits/s - 20 Mbits/s
Decoders	Viterbi
Output	TCP/IP
Temperature range	-10 to 45 degrees C



Cloud Classification



True Colour Image



Vegetation Index