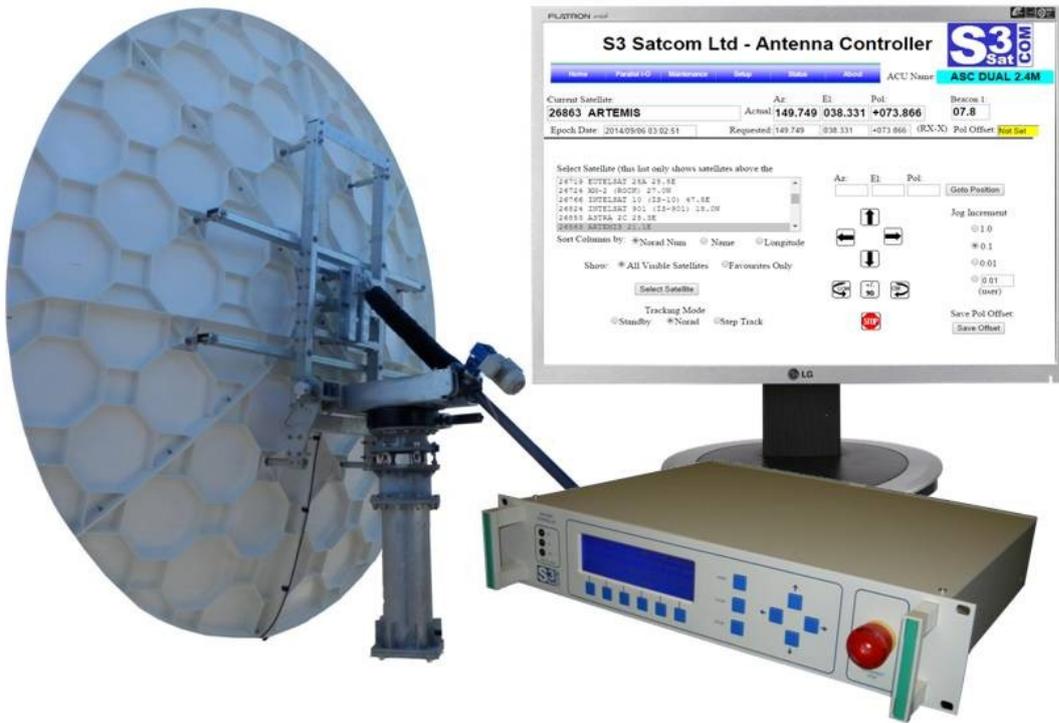




S3 SATCOM 3.8m SATSIO

Antenna Tracking and Pointing System



-  Robust 2 or 3-axis motorised antenna 180° azimuth mount for 3.8m offset antennas.
-  High quality build rack mounting controller with fibre optic link to outdoor motor box.
-  Easy access using web client to monitor and control one or many systems.
-  Rapid selection and pointing at satellites, with automatically updated database.
-  Reliable inclined orbit tracking using NORAD data and advanced algorithms.
-  Accurate position sensing with 17-bit absolute optical encoders.
-  Flexible systems integration with extensive external device connection facilities.
-  Fully featured Remote Control and Monitoring Protocol for NMS

© S3 Satcom Limited 2014. All rights reserved.



SATSIO TECHNICAL OVERVIEW

The S3 Satcom 3.8m Satsio (Small Antenna Tracking System for Inclined Orbit) has been professionally designed by a team of experts, each with over 30 years experience in the satellite communications solutions business. From the robustness and accuracy of the mechanical mount, to the user-friendly web interface, this system has been designed with the professional operator in mind.



SATSIO 3.8m PRECISION MOUNT

Wide Az/EI/Pol Range — Satsio provides inherently orthogonal azimuth and elevation motion, with a 5° to 90° elevation and 180° azimuth range. Optional Ku-band ±90 polarisation motorisation is currently available with C-band polarisation motorization available shortly.

Accurate Sensing and Control— Pointing with a 0.01° accuracy is achieved using 17-bit absolute optical encoders for angle readout. Motorisation is provided by a 3-phase mains motor and slew drive on Azimuth and a 3-phase mains motor on a high grade jack for Elevation. Both are controlled by programmable 3-phase motor controllers located in the outdoor motor box. A 12v dc motor is used for polarisation driven by a PWM programmable drive

Robust Mechanical Build —Made from heavy gauge steel hot dip galvanized for maximum environmental protection, the Satsio mount Interfaces directly to the Prodelin 3.8m offset antenna and either a 10" diameter kingpost or non-pen mount.



SATSIO ROBUST AND RELIABLE CONTROLLER

The Satsio controller provides robust and reliable operation and comprehensive monitoring of key systems. A fibre link connects the controller with the outdoor motor box.

Turn-key controller— The Satsio controller is a 19" rack mounting unit with a front panel display and operator keys. Containing all the hardware and software needed. Simply select a satellite and then automatically track with the Satsio mount.

Advanced tracking software— Antenna pointing uses advanced modelling to calculate the exact position of the satellite at any one time using the NORAD ephemeris data automatically and regularly downloaded by the controller via the internet. Steptrack using an external beacon receiver is also supported.

Connect external devices—Relay contacts, analogue voltage inputs, status inputs and open collector outputs are all provided to interface easily with external systems and devices. A full remote control protocol is also supported, allowing seamless integration into a station NMS.



SATSIO USER FRIENDLY WEB INTERFACE

Satsio is supplied with an integral web server as standard, with separate pages for PC and pocket tablet control...

Anywhere monitor and control— The Satsio user-friendly web interface monitors and controls one or many Satsio installations and any external devices or systems attached to them, removing the need for an expensive separate M&C system..

Accurately track inclined orbits— With NORAD tracking enabled and Satsio regularly downloading the ephemeris data from the internet, the Satsio will automatically move to the precise current position of any accessible satellite and accurately track its position.

Rapidly point at satellites—The operator selects which satellite should be tracked from a regularly updated list of available satellites. Alternatively, directly enter the azimuth, elevation and polarisation of the satellite and the system will move to that position.

ABOUT S3 SATCOM

S3 Satcom provides broadcasters, telcos and corporations with specialist satellite communications products and services.

Our products and systems include fixed earth stations, VSAT networks, M&C software and the market-leading Satsio small antenna tracking and pointing system.

S3 Satcom headquarters is in the United Kingdom. .

S3 Satcom Limited
9 Crittall Road, Witham,
Essex, CM8 3DR, United Kingdom

S3 Satcom reserves the right to change the specification of its products without notice. The text in this document is for guidance only. © S3 Satcom Limited 2014. All rights reserved.