LogicSpectra

EARTH STATION

ANTENNA CONTROL UNIT

LSACS-E33AEE

Specification

ELECTRICAL

Power Input - ACU	AC Mains 220~230V AC, 50Hz
Power Input - ODU	AC Mains 220~230V AC, 1 PH 50Hz 3 PH (Optional)
Power Output - ODU	Variable Speed - Inverter type - 3 PH 230V AC Output Variable Speed - Inverter type - 3 PH 415V AC Output (Optional)
Protection	MCB for AZ, EL and Feed - Over load and short protections.

Angle Measurement

AZ, EL and Feed	SSI Gray code Absolute Encoder

ENVIRONMENTAL

Temperature Range	
Operational (ODU)	-20º to +50º C
Operational (ACU)	0º to +55º C
Humidity	0 to 95% non-condensing

MECHANICAL

Mounting - ACU	19 inch Rack Mount
Mounting - ODU	Wall Mount
Weight - ODU	25 kg approx
Weight - ACU	7 kg approx
Dimensions (WxHxD) - ODU	600 x 600 x 210 MM
Dimensions (WxHxD) - ACU	440 x 88 x 305 MM

ALARMS

Hardware Interlocks	AZ, EL and Feed
Software Interlocks	AZ, EL and Feed
Emergency Stop	

Interfaces

Remote	TCP-IP - RJ45 Connector
ODU <> ACU	TCP-IP - RJ45 Connector
Beacon	0 to 10V External Beacon Tracking

Operational Modes

- Standby Mode
- Manual Mode
- Position Track
- POL Position Track
- Step Track
- Memory Track
- Table Track
- Acquire Satellite
- Maintenance Mode

Features

The Antenna Control Unit bearing model number: LSACS-E33AEE is designed to position an antenna to the desired satellite of interest or place antenna to the required look-up angles. This system is designed for Earth Station Antenna which uses AC Induction motors for antenna AZ and EL rotations. Absolute SSI Gray code Encoders is used to provide the AZ, EL and FEED angle readings.

Features of the Antenna Control System

The Antenna Control Unit performs numerous functions and following list describes the functionalities provided by the Antenna Control Unit.

- Display of AZ, EL, FEED and SS readings
- Display of ACU status
- Display of GPS LAT, LONG, DATE AND UTC Time (If GPS engine Installed)
- Display AZ, EL, FEED Encoder reverse and No Reading messages
- Display of Software and Hardware Interlock messages
- Choose Themes
- Option to set AZ, EL, FEED Encoder Present Angles
- Option to enable or disable AZ, EL and FEED Encoder inverse
- Option to set AZ, EL, FEED encoder gear rations
- Option to change Settings Password
- Option to enter 100+ Satellites including Satellite name, Orbital Position and FEED Angle
- Option to perform step track as and when user required.
- Option to set time interval to perform step track.
- Option to set min. AGC level
- Option to enable/disable time interval.
- Option to enter AZ, EL scan degrees.
- Option to set software limits
- Option to enable/disable software limits
- Option to Inverse AZ, EL, FEED Motors
- Option to set motor speeds of AZ, EL
- Option to set ACU in 2-axis or 3-axis mode
- Option to set GPS Latitude and Longitude. This is used in case of no GPS device installed
- Option to set IP Address
- Tracking (Auto, Manual, Step, Position, Memory, and Table)
- GUI Interface web based.
- 4.3 inch TFT Color Display
- Membrane keys for operation
- User friendly menus and operation.
- Configuration Modes (Station Geographic Parameters Satellite, Position track, POL Position Track and Step Track)
- Antenna control with Mobile (Optional)