Next Generation Controller System

- **Graphical User Interface** – Common shared interface design between controller, handheld, and remote software package. Enables ease of use, reduced training, and advanced graphical operations & diagnostics.

- **Open, Standards Based Platform** – Non-proprietary hardware and software design based on proven and reliable technology. User customizable open source license User Interface.

- **Connectivity & Control** – Full complement of hardware interfaces for legacy and next generation technologies providing flexible accessibility for system networking, monitoring, control and maintenance.

- **Flexible Modular Upgrade Architecture** – Designed for field upgradeable drop-in flexibility of hardware and software enhancements for expanded functionality.

- **Fiber Optic Interfacility Link** – For secure and reliable communications, and protection against lightning, interference and transient voltage.

- **Built-In Spectrum Analyzer** – Efficient, dual function Spectrum Analyzer/Beacon Receiver reducing complexity, saving valuable rack space and test equipment requirements.
**SPECIFICATIONS**

**NEXT GENERATION CONTROL SYSTEM**

**INDOOR UNIT**

**ELECTRICAL**

AC Input Power .......................... 120-250 VAC @ 1A

Summary Alarm Contacts ................. 100 VAC @ 5A, 24 VDC @ 1A

**MECHANICAL**

Dimensions ............................... 19 in x 5.25 in x 15.5 in

Weight .................................. 20 lb Max

Mounting .................................. Rack Mountable 3RU per ANSI/EIA-310-D-1 1992 (5.25 in)

**ADDITIONAL FEATURES**

Software Licensing: Touch Panel GUI code and remote software provided as open-source (GPL) for customer reference use. Controller and embedded systems are proprietary.

**OPTIONS AVAILABLE**

- Built-In Spectrum Analyzer – L-band; doubles as beacon receiver
- Acquisition Assist: Built-in DVB receiver to discriminate satellites
- GSM/GPRS wireless modem for remote access
- Carrier Logging & Mini CMS System (Req’s Spectrum Analyzer Option)
- LNA Redundancy and Waveguide Switching Control
- Built-In Beacon Receiver

**OUTDOOR UNIT**

**ELECTRICAL**

AC Input Power .......................... 208 or 308 VAC Three Phase, 50/60 Hz, 60A max

**MECHANICAL**

Dimensions ............................... 32 in x 26.5 in x 10.5 in

Weight .................................. 60 lb (Other Packages Available)

**FUNCTION FEATURES**

External Interfaces ......................... Ethernet, RS-232C, USB, AISG Interface

M&C Interfaces ............................ SNMP v2c via Ethernet (primary M&C interface; TCP/IP APC100 emulation (serial); TCP/IP based remote control interface available

- Tracking Algorithms – Patented ASC Three-point peaking-based Steptrack included with optional SmarTrack™, Orbital Prediction learning mode NORAD ephememeris tracking, Intelsat Ephemeris tracking, NORAD with adaptive offsets.
- 10 MHz Reference Source
- Redundant Power Supplies
- GPS, Compass, & Inclinometers for Transportable Applications
- Multiple displays for distributed access

**Next Generation Controller Block Diagram**