GLAST Large Area Telescope:

Electronics, Data Acquisition & Flight Software W.B.S 4.1.7

LAT Power and Monitoring EGSE for LAT Testing

R. Bielawski, Dave Nelson
Power and Monitoring EGSE for LAT

- **Function Generator**
- **28-V Bench-supply**
- **Test VME crate**
- **VSC VME crate**
- **LAT Regulated Bus-Protection Unit**
- **LAT Unregulated Bus-Protection Unit**
- **Marway Power Distribution Unit**
- **XANTREX XFR-35-35**
- **SIU-Prime 2A max**
- **SIU-Redu 2A max**
- **DAQ-Prime 24A max**
- **DAQ-Redu 24A max**
- **VCHP-Prime 2A max**
- **VCHP-Redu 2A max**
- **GRID/Anti-freeze-Prime 16A max**
- **GRID/Anti-freeze-Redu 16A max**
- **28-V Ben-supply**
- **110V/17A 220V/9A**
- **110V/2/9A**
- **110V/1A**
- **V-charts monitors set 1 from LAT-DS-05589**
- **V-charts monitors set 2 from LAT-DS-05589**
- **Monitors from U-BPU**
- **V-chartsanti-freeze-prime-V**
- **V-chartsanti-freeze-prime-I**
- **V-chartsanti-freeze-redu-V**
- **V-chartsanti-freeze-redu-I**
- **Note: DAQ feed includes DAQ-Power and 4 TM's and 8 VM's**
- **VCHP feed includes VCHP-Power and 4 VM's**
- **Note: I&T presently uses HP6032A which are ok**
- **SC Interface Temp and Volt. Monitors from LAT**
- **Flyaway sensor monitoring to separate data-logger system**

---

**Power and Monitoring EGSE for LAT**

- **220V 3-phase, 30A, or similar, tbd**
- **> 25 feet**
- **Emergency Shut-Off**

---

**LAT Control Rack**

- **LAT Power Rack**
- **LAT Regulated Bus-Protection Unit LAT-DS-05589 (only prime or redundant can be powered)**
- **LAT Unregulated Bus-Protection Unit LAT-DS-06518 (both, prime and redundant can be powered)**
- **Function Generator**
- **28-V Bench-supply**
- **Test VME crate**
- **VSC VME crate**
- **LAT Regulated Bus-Protection Unit**
- **LAT Unregulated Bus-Protection Unit**
- **Marway Power Distribution Unit**
- **XANTREX XFR-35-35**
- **SIU-Prime 2A max**
- **SIU-Redu 2A max**
- **DAQ-Prime 24A max**
- **DAQ-Redu 24A max**
- **VCHP-Prime 2A max**
- **VCHP-Redu 2A max**
- **GRID/Anti-freeze-Prime 16A max**
- **GRID/Anti-freeze-Redu 16A max**
- **28-V Ben-supply**
- **110V/17A 220V/9A**
- **110V/2/9A**
- **110V/1A**
- **V-charts monitors set 1 from LAT-DS-05589**
- **V-charts monitors set 2 from LAT-DS-05589**
- **Monitors from U-BPU**
- **V-chartsanti-freeze-prime-V**
- **V-chartsanti-freeze-prime-I**
- **V-chartsanti-freeze-redu-V**
- **V-chartsanti-freeze-redu-I**
- **Note: DAQ feed includes DAQ-Power and 4 TM's and 8 VM's**
- **VCHP feed includes VCHP-Power and 4 VM's**
- **Note: I&T presently uses HP6032A which are ok**
- **SC Interface Temp and Volt. Monitors from LAT**
- **Flyaway sensor monitoring to separate data-logger system**
Unregulated Feeds Bus-Protection Unit

GRID/Anti-Freeze Prime Power Input

On/Off Switch

Over-Current Switch

A-Meter

V-Meter

Over/Under Voltage Switch

Override under voltage

GRID/Anti-Freeze Prime Power

V-Monitor-Prime-GRID/Anti-Freeze

I-Monitor-Prime-GRID/Anti-Freeze

GRID/Anti-Freeze Redu Power

V-Monitor-Redu-GRID/Anti-Freeze

I-Monitor-Redu-GRID/Anti-Freeze

110V AC input

2A

AC Power on/off (turns-off all AC and low-voltage feeds)

AC power to relays and meters

2A

On/Off Switch