



Description

The Galero™ Microprocessor Controller (GMC) from Power-One provides comprehensive monitoring and control of the Galero Power System. This digital controller monitors total system conditions including DC voltage, rectifier current, rectifier temperature, system capacity, battery parameters, and circuit breaker status.

The GMC enables data storage of system configuration information such as battery type, installation date, and system commission date. Visual notification of alarm and warning conditions are indicated by front panel LEDs, while descriptions of the alarms are provided through RS232 communication using PC-based PowCom™ software package.

To meet individual site requirements, the GMC contains a Programmable Logic Unit that can be programmed to monitor and control specified requirements. This allows actions to be set, alarms to be triggered, and outputs to be activated based on internal and external signal monitoring, comparing and processing.

Features

User controls and interfaces:

- User-selectable alarm parameters
- 40 event data logging
- Password controlled environment
- RS232 Interface and Form "C" dry alarm contacts
- Programmable alarm routing
- Programmable logic unit

Intelligent battery management:

- Temperature compensation with programmable compensation factor
- Automatic and manual load testing
- Battery voltage and symmetry monitoring
- Capacity testing
- Low voltage disconnect
- Optional plug-in Ethernet interface (PNI module)

Input

Voltage	30-60V DC
Current	<200mA at 48V

Interface

Display	N/A
Internal Communication	RS485 data bus
External Communication	RS232 Serial interface for remote control from a PC with PowCom software. TCP/IP or SNMP available by using the optional plug-in Ethernet interface (PNI card)
Indications	Green LED - Power ON Yellow LED - System warning message Red LED - System alarm message
Controls	N/A
Signal Inputs (via alarm interface)	2 battery symmetry (12V increments) 1 battery temperature sensor 3 analogue inputs for general use 2 digital inputs for general use
Software	Site upgradeable through EPROM Flash
Language	N/A

Alarms

Alarm History	The last 40 events are saved and include a time and date stamp.	
Alarm Contacts	Four potential free change over alarm contacts. Two open collector outputs for LVD.	
Alarms	High System Voltage	1*
	Low System Voltage	1*
	Load/ Battery Disc.	1*
	Mains Error	3*
	DC Fuse Failure	2*
	Battery Failure	4*
	Module Failure	2*
	Battery Temp. Alarm	4*
	Symmetry Failure	4*
	Battery Fuse Failure	1*
	High Load	2*
	Urgent Module Failure	1*
	Communication Failure	2*
<p>* All alarms are indicated using an LED . The numbers represent an example of alarm routing: 1) Urgent alarm, 2) Service alarm, 3) Main AC Failure, 4) Battery related failure 16 additional user defined alarms available.</p>		

Other Technical Data

Dimensions (WxHxD)	60 x 125 x 250mm (2.4 x 4.9 x 9.8in.)	
Weight	0.5kg (1.1lbs.)	
Operating Temperature	-25 to +55°C	
Storage Temperature	-50 to +85°C	
Environment	Storage: Transport: Operation:	ETS 300 019-2-1 ETS 300 019-2-2 ETS 300 019-2-3

Battery Management

Battery Disconnection	A feature that allows voltage disconnection of batteries.
Boost Charging	Manual time controlled or automatic boost charging with adjustable time and voltage levels.
Battery Test	Automatic or manual testing of batteries up to four times per year. Variables include: test duration, end voltage, Ah, and allowable symmetry variation.
Symmetry Measurement	Optional tool that measures batteries for early detection of thermal runaway. Allows for separate measurements of up to 2 parallel battery branches, each divided into four blocks.
Temperature Compensation Charging	Allows continuous adjustment of output voltage according to battery temperature. Feature includes adjustable compensation factor and separate thresholds for alarms.
PLD	N/A
Enhanced Battery Monitoring	Monthly logging of essential battery parameters: average/ peak temperature, temp. hours, current, charging voltage and symmetry voltage. Stores parameters for 5 years.

Note: All specifications are subject to change without notification.