# GCCP 1.2
## Control Panel




Image shown may not reflect actual configuration.

## GCCP 1.2 – Control Panel

GCCP 1.2 is an Auto Start Control Module suitable for a wide variety of diesel gen-set applications. Monitoring an extensive number of engine parameters, the modules will display warnings, shutdown and engine status information on the back-lit LCD screen, illuminated LEDs and remote PC.

### Description

The controller is compatible with electronic (CAN) and non-electronic (magnetic pick-up/alternator sensing) engines and offer an extensive number of flexible inputs, outputs and extensive engine protections so the system can be easily adapted to meet the most demanding industry requirements.

The extensive list of features includes enhanced event and performance monitoring, remote communications & PLC functionality. The modules can be easily configured using a configuration suite PC software.

### Full Range of Attachments

- Wide range of system expansion attachments, designed specifically to work with the GCCP controller
- Flexible packaging options for easy and cost effective installation

### Benefits

- Hours counter provides accurate information for monitoring and maintenance periods
- User-friendly set-up and button layout for ease of use
- Multiple parameters are monitored & displayed simultaneously for full visibility
- The module can be configured to suit a wide range of applications for user flexibility
- PLC editor allows user configurable functions to meet user specific application requirements
- RS485 Communication port can be used for the Remote Monitoring Communication (Compatible with Cat PLG)

### World Wide Product Support

- Cat dealers provide extensive pre and post sale support
- Cat dealers have over 1,600 dealer branch stores operating in 200 countries

### Features

- • 4-line back-lit LCD text display
- Multiple display languages
- Five-key menu navigation
- LCD alarm indication
- Customisable power-up text and images
- Data logging facility
- Internal PLC editor
- Protections disable feature
- Fully configurable via PC using USB & RS485 communication
- Front panel configuration with PIN protection
- Power save mode
- 3-phase generator sensing and protection
- Generator current and power monitoring (kW, kvar, kVA, pf) kW and kvar overload and reverse power alarms
- Over current protection
- Unbalanced load protection
- Breaker control via fascia buttons
- Fuel and start outputs configurable when using CAN Support for 0V to 10V & 4 mA to 20 mA sensors
- 8 Configurable digital inputs (3 available for Customer use)
- 8 Configurable digital outputs (5 available for Customer use)
- 4 Configurable analogue inputs (3 available for Customer use)
- CAN, MPU and alternator frequency speed sensing in one variant
- Real time clock
- Engine pre-heat and post-heat functions
- Engine run-time scheduler
- Engine idle control for starting & stopping
- Fuel usage monitor and low fuel level alarms
- 3 Configurable maintenance alarms
- MODBUS RTU support
- User configurable MODBUS pages

## SPECIFICATIONS

### DC SUPPLY

#### CONTINUOUS VOLTAGE RATING

8V to 35V continuous
5V for upto 1 minute

#### CRANKING DROPOUTS

Able to survive 0V for 100 mS, providing supply was at least 10V before dropout and supply recovers to 5V. This is achieved without the need for internal batteries.

LEDs and backlight will not be maintained during cranking

#### MAXIMUM OPERATING CURRENT

260 mA at 12V, 150 mA at 24V

#### MAXIMUM STANDBY CURRENT

145 mA at 12V, 85 mA at 24V

#### CHARGE FAIL/EXCITATION RANGE

0V to 35V

#### GENERATOR & MAINS (UTILITY) VOLTAGE RANGE

15V to 415 V AC (Ph to N)
26 V to 719 V AC (Ph to Ph

#### MAGNETIC PICK-UP VOLTAGE RANGE

+/- 0.5V to 70V

#### FREQUENCY RANGE

10,000 Hz (max)

### INPUTS

#### DIGITAL INPUTS A TO H

Negative switching

#### ANALOGUE INPUTS A & D

Configurable as:
Resistive / Voltage (0 - 10V) / Current (4 - 20mA)

#### ANALOGUE INPUTS B & C

Configurable as:
Resistive sensor input only

## OUTPUTS

#### OUTPUT A and B (FUEL & START)

15A DC at supply voltage

#### AUXILIARY OUTPUTS C, D, E, F, G, H, I & J 2

A DC at supply voltage

## DIMENSIONS

#### OVERALL

216 mm x 158 mm x 43 mm
8.5″ x 6.2″ x 1.5″

#### PANEL CUTOUT

184 mm x 137 mm
7.2″ x 5.3″

#### MAXIMUM PANEL THICKNESS

8 mm
0.3″

#### OPERATING TEMPERATURE

-30°C to +70°C
-22°F to +158°F

#### STORAGE TEMPERATURE RANGE

-40°C to +85°C
-40°F to +185°F

## STANDARDS

UL, cUL Listed

NFPA 70#

Electro-Magnetic Compatibility: BS EN 61000-6-2/6-4 Electrical Safety: BS EN 60950
Temperature: BS EN 60068-2-1, BS EN 60068-2-2
Vibration: BS EN 60068-2-6
Humidity: BS EN 60068-2-30, BS EN 60068-2-78 Shock: BS EN 60068-2-27
Degrees of protection provided by enclosures: BS EN 60529 Ingress Protection:
IP65 – Front of module when installed into the control panel with the optional sealing gasket
# Applicable codes and standards facilitate compliance to NFPA 70

# GCCP 1.2 Control Panel
# Electric Power

## OPTIONAL MODULES

### Remote annunciator



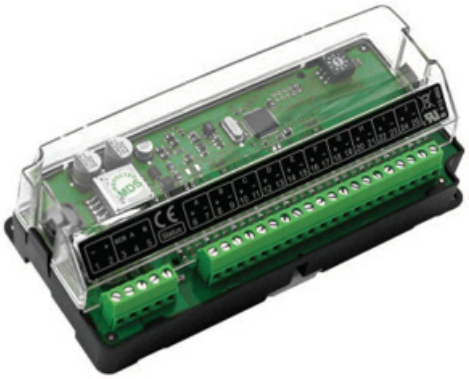
The Remote annunciator with an integral sounder is an output LED expansion module is designed to display a maximum of eight individual LED indications up to a maximum distance of 1 km (0.6 miles). The annunciator will consist of two modules to provide a 16 Channel Fault annunciation. The Panels are fitted with removable label cards which can be used to identify the standard NFPA alarms
.

**Key Features:**

- Panel mount
- Vertical design
- In-built alarm
- Alarm mute button
- Max of 80 configurable LED's

### Input Expansion Module

The Input Expansion module is used in conjunction with supported GCCP controllers to provide additional, flexible, input functionality. The module's ID switch is configurable from the module and the 10 inputs can be configured from within the 'host controller'. The inputs can be configured in a number of ways to connect to digital switches, resistive sensors, 0-10V DC signals or 4-20 mA sig.



**Key Features:**

- DIN rail & chassis mount
- Power on/link lost LED
- 1.2 km (0.75 Mile) working range
- Connect maximum of 4 x Input Modules to a single host controller
- Max of 40 configurable inputs

### Output Expansion Module

The output relay expansion module for use with compatible GCCP control modules has been designed to extend a host module's output capabilities.
A maximum of 10 relays can be connected to an individual module at any one time.
All outputs are configurable via the host controller.



**Key Features:**

- Power On/Link Lost LED ID SWITCH
- 10 Expansion modules can be connected to 1 host controller at a time
- 8 Configurable relay contacts with LED indicators:
  - o 4 Normally Open (N/O)
  - o 4 Change Over (C/O)
- Terminal strip connection for quick and easy set-up


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