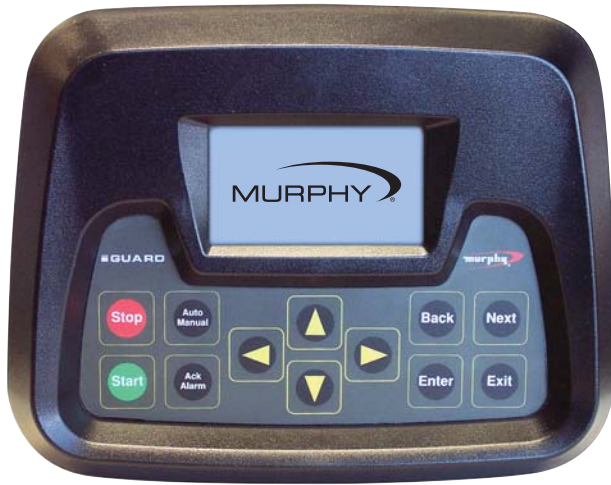


# DIGITAL GENERATOR SET CONTROLLER

AL-02058B  
Effective 04-03  
Catalog Section 75  
(00-02-0529)



## iGUARD™ Gen-Set Controller

- **SAE J1939 Compatible.** *Our new controller reads this common SAE protocol used on newer electronic engines.*
- **Universal.** *This controller fits any standard gen-set application. Simplify your life with only one controller to learn and stock.*
- **Designed to meet NFPA110/NFPA 99**
- **Unmatched Price.** *No other controller has these features at a comparable price.*

### Description

The iGUARD™ is one controller for all your engine-driven generator set applications. It is designed from the ground up to work with today's electronic engines, accepting the J1939 protocol. The iGUARD™ also works with non-electronic engines.

Designed to meet NFPA-110 and NFPA-99 requirements the iGUARD™ has ample inputs and outputs.

The new iGUARD™ controller can be used for all gen-set applications: single-phase or three-phase, and 12 or 24 V.

Engine speed can be read from a magnetic pickup, J1939 data bus.

### Get Connected

The new controller includes both RS232 and RS485 ports for easy connection to a computer or communication devices.

### Programming Updates in the Field

Because the microprocessor is flash-based, the controller can be easily re-programmed or updated using a PC in the field.

### Applications

- Packagers and OEM
- Rental Companies
- Prime Power
- Hospitals
- Ground Support Equipment
- Agriculture
- Aquaculture

### iGUARD Standard Components

- 24 - Digital inputs
- 8 - Analog inputs (one dedicated for battery)
- Inputs for up to three phases and neutral of AC voltage
- Inputs for 3 CT's for current monitoring
- 1 - Magnetic pickup input
- 8 - 20A Form "C" relays
- 1 - RS232 port
- 1 - RS485 port
- 1 - RS232/RS485 port
- 1 - J1939 port
- 1 - 64 x 128 pixel full graphic LCD with backlight
- 1 - 12 position keypad

### Mounts in Several Ways

- Standard set-top
- Alternator mounting
- In existing enclosures

### Specifications

#### Mounting (Cut-out) Dimensions:

7.05 x 5.25 x 2.76 in. (179 x 133 x 70 mm)

#### Mounting Screws:

4, #6-32 screws and nitrile rubber o-ring are supplied to meet NEMA4 specs.

#### Case Material:

Black Polycarbonate, textured finish, UV stabilized.

#### Connection:

600V rated multi-wire quick connect for DC and AC connections, suitable for wire harnessing.

#### Power supply:

Operates from any DC supply for 8-35VDC continuous. Brownout (5V) ride-through is 5 seconds and a total blackout (0V) ride-through of 100 milliseconds.

#### Vibration/Survivability:

3g, 3 axis, frequency swept 10-1000 Hz.

#### Operating and Storage Temperature Range:

-40/+185°F (-40/+85°C).

#### LCD Operating Range:

-4/+176°F (-20/+80°C).

#### I/O's:

Designed to meet NFPA110/NFPA 99 plus offers additional inputs.

#### Shipping Dimensions:

10 x 9 x 6 in. (254 x 229 x 152 mm)

#### Shipping Weights:

2 lb. (910 g.).

#### Performance Specs

NFPA-110, NFPA-99

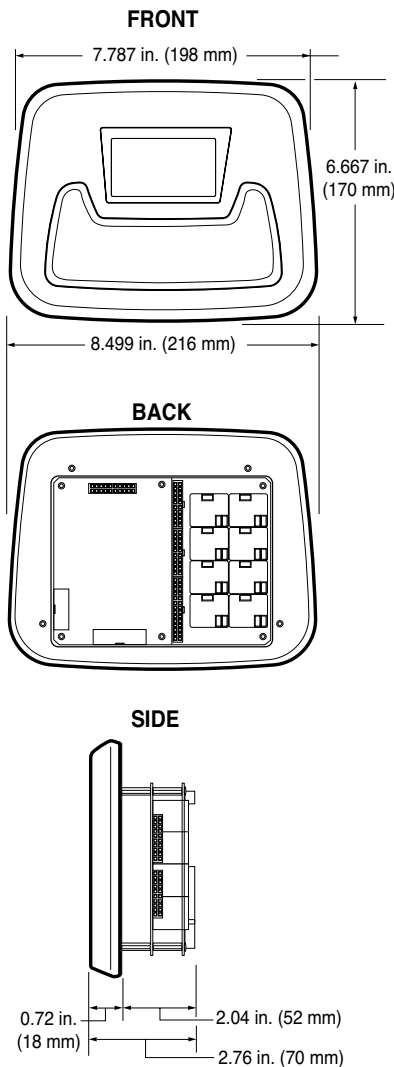
SAE Load Dump Test

#### Pending Approvals

UL 508

**MURPHY**®

## Typical Dimensions



### How to Order:

Specify:

**iGUARD™**

Digital Generator Set Controller.

### Warranty

A limited warranty on materials and workmanship is given with this FW Murphy product. A copy of the warranty may be viewed or printed by going to [www.fwmurphy.com/support/warranty.htm](http://www.fwmurphy.com/support/warranty.htm)

## iGuard™ Accessories

### Wire Harnessing

Part Number	Description
75-00-0074	4-position power connector; 12 ft (3.65 m) wire leads.
75-00-0075	10-position comm. connector—J1939, RS232, RS485; 12 ft. (3.65 m) wire lead
75-00-0076	10-position communications connector - RS232, RS485
75-00-0077	Digital Inputs 1-8; 12 ft. (3.65 m) wire leads 12 ft. (3.65 m) wire leads
75-00-0078	Digital Inputs 9-24; 12 ft. (3.65 m) wire leads
75-00-0079	Analog Inputs, Magnetic Pickup; 12 ft. (3.65 m) wire leads
75-00-0080	ESD Jumper; 0.2 feet (61 mm) wire leads
75-00-0081	AC Voltage connector; 12 ft. (3.65 m) wire leads
75-00-0082	AC Current connector; 12 ft. (3.65 m) wire leads

### Senders and End Devices

Part Number	Description
05-70-1858	0-100 psi Oil pressure sender
10-70-2013	300 °F (150°C) Coolant temperature sender
15-70-0116	EL150K1 Oil level indicator and low oil level shutdown
15-70-0104	L129 high/low Oil level indicator and shutdown
15-70-0660	LM2000 Engine oil replenisher and low oil level shutdown
05-70-6345	PXMS-100 4-20mA Pressure sender 100 psi

### Current Transformer

Part Number	Description
00-00-2592	50:5A Current transformer, 12 inch (305 mm) leads
00-00-2707	60:5A Current transformer, 12 inch (305 mm) leads
00-00-4893	75:5A Current transformer, 12 inch (305 mm) leads
00-00-2372	100:5A Current transformer, 12 inch (305 mm) leads
00-00-2484	150:5A Current transformer, 12 inch (305 mm) leads
00-00-2485	200:5A Current transformer, 12 inch (305 mm) leads
00-00-2486	300:5A Current transformer, 12 inch (305 mm) leads
00-00-2487	400:5A Current transformer, 12 inch (305 mm) leads
00-00-2488	500:5A Current transformer, 12 inch (305 mm) leads
00-00-2489	600:5A Current transformer, 12 inch (305 mm) leads
00-00-2490	800:5A Current transformer, 12 inch (305 mm) leads
00-00-2441	1000:5A Current transformer, 12 inch (305 mm) leads
00-00-2441	1000:5A Current transformer, 12 inch (305 mm) leads
00-00-2516	1200:5A Current transformer, 12 inch (305 mm) leads
00-00-2517	1500:5A Current transformer, 12 inch (305 mm) leads
00-00-2504	1600:5A Current transformer, 12 inch (305 mm) leads
00-00-2518	2000:5A Current transformer, 12 inch (305 mm) leads
00-00-2519	3000:5A Current transformer, 12 inch (305 mm) leads

**MURPHY**

**FW Murphy**  
 P.O. Box 470248  
 Tulsa, Oklahoma 74147 USA  
 +1 918 317 4100  
 fax +1 918 317 4266  
 e-mail sales@fwmurphy.com  
 www.fwmurphy.com

**CONTROL SYSTEMS & SERVICES DIVISION**  
 P.O. Box 1819; Rosenberg, Texas 77471; USA  
 +1 281 633 4500 fax +1 281 633 4588  
 e-mail sales@fwmurphy.com

**MURPHY DE MEXICO, S.A. DE C.V.**  
 Blvd. Antonio Rocha Cordero 300, Fracción del Aguaje  
 San Luis Potosí, S.L.P.; México 78384  
 +52 444 8206264 fax +52 444 8206336  
 Villahermosa Office +52 993 3162117  
 e-mail ventas@murphymex.com.mx  
 www.murphymex.com.mx

**FRANK W. MURPHY, LTD.**  
 Church Rd.; Laverstock, Salisbury SP1 1QZ; U.K.  
 +44 1722 410055 fax +44 1722 410088  
 e-mail sales@fwmurphy.co.uk  
 www.fwmurphy.co.uk

**MURPHY SWITCH OF CALIFORNIA**  
 41343 12th Street West  
 Palmdale, California 93551-1442; USA  
 +1 661 272 4700 fax +1 661 947 7570  
 e-mail sales@murphyswitch.com  
 www.murphyswitch.com

**MACQUARRIE CORPORATION**  
 1620 Hume Highway  
 Campbellfield, Vic 3061; Australia  
 +61 3 9358 5555 fax +61 3 9358 5558  
 e-mail murphy@macquarrie.com.au



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