

# NEW Engine Monitor

**DYNALCO**<sup>®</sup>

A Barksdale Brand



## CANbus Monitor D-100 Series

New high resolution CANbus monitor to simply display your engine parameters.

Control  
every move



**Barksdale**<sup>®</sup>  
CONTROL PRODUCTS  
**CRANE** Barksdale, Inc./Barksdale GmbH  
A Subsidiary of Crane Co.

### Features

- ▶ High resolution 320 x 240 color LCD, clear high contrast screen
- ▶ 7 analog, 2 digital, and 1 signal inputs
- ▶ 4 relay outputs
- ▶ Full sunlight readable with maximum brightness of 750 NIT (cd/m2)
- ▶ User configurable single and quadruple screens
- ▶ 5 soft keys provide easy, full local configuration
- ▶ Select digital values, analog gauges, or both to meet your preference
- ▶ Displays TIER 4 engine information
- ▶ Alarms provide immediate visual and audible indications
- ▶ Password protected to avoid unauthorized changes
- ▶ IP66 enclosure rating

### Applications

- ▶ CANbus Enabled Engines
- ▶ CANbus Enabled Power Generators



D-100 CANbus monitor offers J1939 compatibility for displaying engine performance parameters as well as providing over/under speed threshold protection. The D-100 can also monitor and display various types of inputs to help measure parameters such as temperature, pressure, and RPM. Plus it can send output signals to trigger controls via 4 independent relays.

### General Specifications\*

<b>Enclosure Material:</b>	ABS
<b>Enclosure Rating:</b>	IP 66 front IP 67 back
<b>Electrical Connection:</b>	Two 12-pin Deutsch DT04-12P receptacles
<b>Power Supply:</b>	10 – 30 VDC
<b>Communications:</b>	RS232, 2 CANbus 2.0B, USB2.0
<b>Inputs:</b>	
(7) Analog Inputs	Each input can be selected as: 0 to 2.5 VDC 0 to 10 VDC 0 to 1K ohms
(2) Digital Inputs	Switch contact to ground or open collector type sensor. Max frequency 50 Hz.
(1) Signal Input (Magnetic Pickup)	0 to 5000 Hz
<b>Outputs:</b>	4 relay outputs rated 0.5 A

<b>Display:</b>	3.5" Color TFT LCD, QVGA resolution 320 x 240 pixels
Viewing Angle:	Wide horizontal and vertical viewing angle
Brightness:	750 NIT Full sunlight readable
<b>Temperature Range:</b>	
Operating:	-40 to +158 °F (-40 to +70 °C)
Storage:	-40 to +176 °F (-40 to +80 °C)
<b>Displayed Data If received from the engine and transmission*</b>	Electrical, Fuel, Pressure, Temperature, Speed, Percentage, Time.  *Refer to Operations Manual for more details.
<b>Dimensions:</b>	3.3" diameter cutout 3.75" x 3.75" bezel [panel]



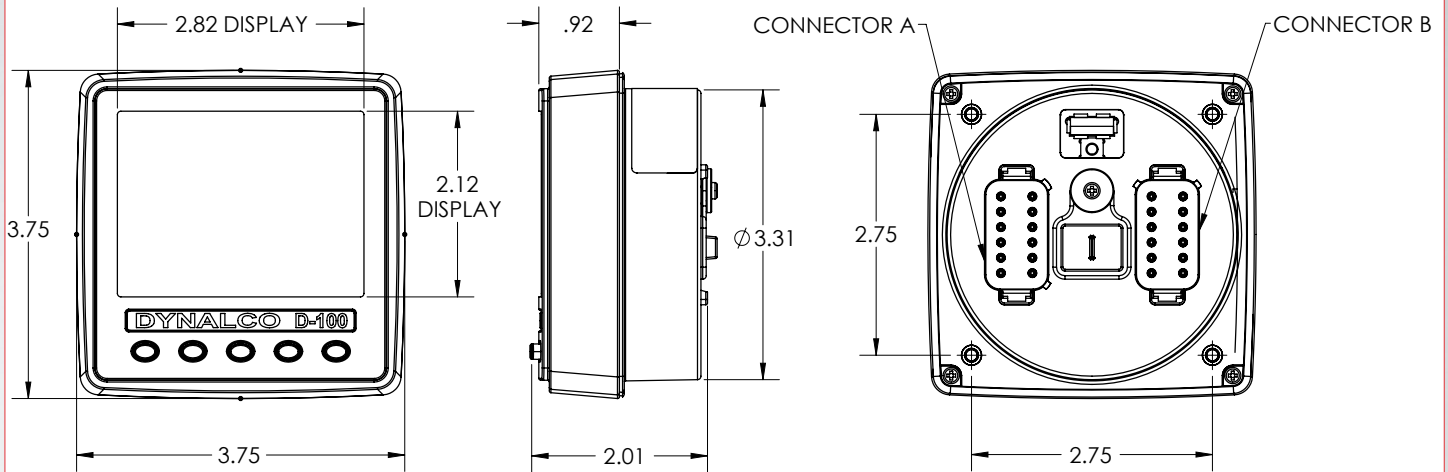
# Engine & Emission Controls

## CANbus Monitor

## D-100 Series

### Technical Drawing

Dimensions in inch



### Pin Assignment

CONNECTOR A		
1	GND	GROUND
2	PWR	10 – 30 VDC
3	RO-1	RELAY/SOLENOID OUTPUT 1
4	RO-2	RELAY/SOLENOID OUTPUT 2
5	CAN2 (-)	ISOLATED CAN SUPPLY (-)
6	CAN2 (+)	ISOLATED CAN SUPPLY (+)
7	CAN2H	ISOLATED CAN DATA H
8	CAN2L	ISOLATED CAN DATA L
9	RO-3	RELAY/SOLENOID OUTPUT 3
10	RO-4	RELAY/SOLENOID OUTPUT 4
11	CAN1L	PRIMARY CAN DATA L
12	CAN1H	PRIMARY CAN DATA H

CONNECTOR B		
1	AI-1	ANALOG INPUT 1
2	AI-2	ANALOG INPUT 2
3	AI-3	ANALOG INPUT 3
4	AI-4	ANALOG INPUT 4
5	AI-5	ANALOG INPUT 5
6	AI-6	ANALOG INPUT 6
7	AI-7	ANALOG INPUT 7
8	DI-1	DIGITAL INPUT 1
9	DI-2	DIGITAL INPUT 2
10	SIG	SIGNAL INPUT
11	RS232RX	RS232 RECEIVE
12	RS232TX	RS232 TRANSMIT

### Order Number<sup>1</sup>

Part Number	Description
D-100	CANbus monitor with (4) M4 nylon studs, (4) thumbnuts
D-100-B	D-100 with mounting bracket
D-100-C	D-100 with cable harness assembly
D-100-B-C	D-100 with mounting bracket and cable harness assembly

### Accessories<sup>1, 2</sup>

Part Number	Description
270A-105560	Cable harness – 3 ft. length with (2) Deutsch connectors. (Also included in D-100-C & D-100-B-C)
240D-13177	Mounting bracket. (Also included in D-100-B & D-100-B-C)
D-100-KIT	Hardware kit: (4) M4 nylon studs, (4) thumbnuts. (Also included in D-100).

#### Notes

- 1: Refer to Sales Drawing and Installation and Operation Manual for more details
- 2: Accessories are included in some part numbers, and may be purchased separately.

# DYNALCO® Now part of Barksdale's family of products.

Founded in 1968, Dynalco instruments & control products for rotating equipment in demanding applications have a history of performance and reliability.

Dynalco products provides rugged and dependable instrumentation for monitoring and controlling rotating equipment in oil and gas, marine, power generation and processing industries. Products include speed sensors, tachometers, process monitors and speed switches for hazardous areas.

## Need a speed sensor for your CANbus application?



### Magnetic Pickups

- ▶ Rugged fully potted body with a 316 stainless steel housing
- ▶ Industry leading life-time warranty on passive pickups
- ▶ Wide variety of passive (non-powered) and active (powered) models available
- ▶ Variable Reluctance (VR) and Hall-Effect (HE) technologies available
- ▶ CSA Class 1, Div. 1 and Div. 2 and ATEX approvals
- ▶ Temperature rating from -65 °F to +225 °F
- ▶ Lifetime warranty

## Dynalco products - reliable products for nearly 50 years

### Speed Switch / Transmitter



**SST7000 Series**  
Up to 4 field configurable relays

### Tachometers & General Purpose Meters



**MTH-103E Series**  
Tachometer, hourmeter and trip

### Scanners / Monitors / Data loggers



**UM600 Series**  
2, 6 or 24 channel models

### Analog Input Meters



**LMD120A Series**  
Display units for diverse application parameters

**Barksdale Inc.**  
3211 Fruitland Ave.  
Los Angeles, CA 90058-0843  
U.S.A.  
Phone: (800) 835-1060  
Fax: (323) 589-3463  
Email: sales@barksdale.com  
www.barksdale.com

**Barksdale GmbH**  
Dorn-Assenheimer Strasse 27  
61203 Reichelsheim, Germany  
Phone: (49) 6035-949-0 (main office)  
(49) 6035-949-204 (sales)  
Fax: (49) 6035-949-111/-113  
Email: info@barksdale.de  
www.barksdale.de

**Barksdale China**  
33F Huaihai Plaza  
1045 Central Huaihai Road  
Shanghai 200031 P.R. China  
Phone: +86 21 6127-3000  
Fax: +86 21 6473-3298  
ChinaSales@barksdale.com  
www.BarksdaleChina.com

**Barksdale India**  
Crane Process Flow Technologies (India) Ltd  
Solitaire, 6th Floor  
S. No. 131/1 + 2  
ITI Road Aundh  
Pune - 41107, India  
Phone: + 91-20-71207162  
Fax: + 91-20-71207177  
ssarkar@barksdale.de