

## GDC

### GENERAL DISPLAY & CONTROLLER

DIGITAL TECHNOLOGY FOR OPTIMIZED MEASURES



GDC-01/02

GDC-04/06/08



GDC-EX



GDC-H



#### THE ADVANTAGE

**UNIVERSAL TERMINALS:** Use with Cross Smart Sensors for measurements of water analysis, gas analysis and process control.

**ADVANCE DISPLAY:** LCD screen for GDC-01/02 and GDC-H; Touch LCD screen for GDC-Plus; OLED for GDC-Ex.

**SINGLE OR MULTIPLE CHANNELS:** for multiple parameters, 4-20 mA and relay outputs up to 8 channels.

**DIGITAL INTERFACE:** RS485/Modbus RTU standard and optional USB for GDC-04/6/8 only.

**DATA LOGGER** Programmable 1,000 to 30,000 data point capacity for GDC-H and GDC-04/6/8.

**BLUETOOTH:** Built-in Bluetooth module enables wireless connection to standard operating equipment. Like Smartphone/ Tablet running iOS or Android or PC for easy data logging and calibration.

**GDC-PLUS** terminals based on Linux system to run cross-platform software Delta-Phase View™


**GDC-EX EXPLOSION PROOF TERMINAL:** Using magnetic screwdriver for set up, eliminates the need to open the enclosure cover.

# GENERAL DISPLAY & CONTROLLER

## DESCRIPTION

GDC (General Displayer & Controller) series terminals are designed for continuous measurements with Cross Smart Sensors in general purpose industrial or municipal environments. GDC terminals have the ability to extend network using intelligent sensors with RS485, Modbus RTU protocol output. GDC terminals supply power and communicate with sensors to acquire signals. A plug and play function is available for those sensors in our recommended list, that means if you plug an intelligent sensor into a GDC it will automatically configure to any of the listed measurements. GDC terminals can be expanded to work with any sensors with analog or digital outputs for customized configuration.

There are optional loop-powered terminals, GDC-LP transmitter for those customers in industrial area who get used to two-wire meters working with some electro-chemical analogue sensors like PH7A, RX7A, MV7A and CS7A. Please consult factory for details.

	Low Voltage Directive 2014/35/EU
	Electromagnetic Compatibility Directive 2014/30/EU
	RoHS 2 Directive 2011/65/EU
	EN 61010-1:2010; EN 61326-1:2013

## SPECIFICATIONS

### Measuring Parameters

Dependent on Cross Smart Sensor

### Accuracy

±0.1%F.S.

### Repeatable

±0.1%

### Linearity

±0.05%

### Response time

T90<1s

### Special Application

Optional special software of GDCs like:

ATM-Atmosphere compensation

OCF-Open Channel Flow Measurement.

AVF-Area Velocity Flow measurements

### Display

GDC-01/02/H: Backlit LCD Screen

GDC-04/06/08: LCD Touch Screen

GDC-Ex: OLED Screen

Parameter, value, % and Unit

### Operating Temperature

-20 to 60°C (-4 to 140°F)

### Power Supply

24VDC (18 to 36VDC), 100 to 240VAC, 50Hz/60Hz

Rechargeable Battery (GDC-H only)

### Input

Digital RS485/Modbus and Optional Analog input

### Output

Analog output: 4 to 20mA, up to 8 Channels depends on GDC model;

Pulse: flow measurement only

Relay: up to 9 SPDT (According to Model selection)

5A@250VAC / 5A@30VDC

*No output for GDC-H*

### Digital Interface

RS485 Modbus RTU

Bluetooth 5.2

Optional Hart, Profibus, FF etc.

Optional USB port for GDC-04/06/08 only

Optional Network port for GDC-04/06/08 only

### Data Logger

1,000 to 30,000 data point capacity for GDC-H and GDC-04/6/8. Programmable and time stamped.

### Weight

GDC-01/02 1.76 lbs. (0.8kg)

GDC-04/06/08 3.31 lbs. (1.5kg)

GDC-Ex 5.0 lbs. (2.27kg)

### Explosion Proof

GDC-Ex: Ex d IIC T6

### Ingress Protection Rating

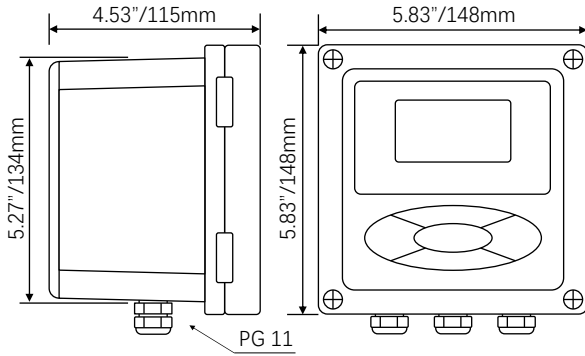
IP65 for GDC-04/06/08

IP66 for GDC-01/02, GDC-Ex

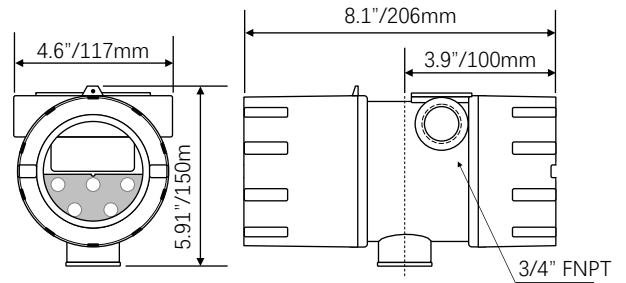
IP54 for GDC-H

## DIMENSIONS

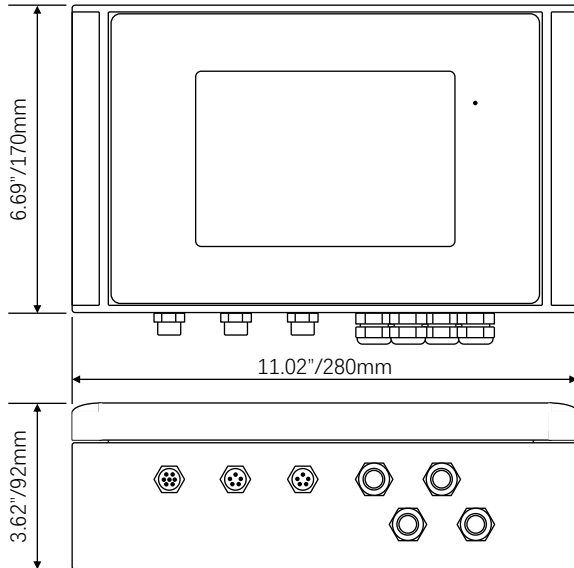
GDC-01/02



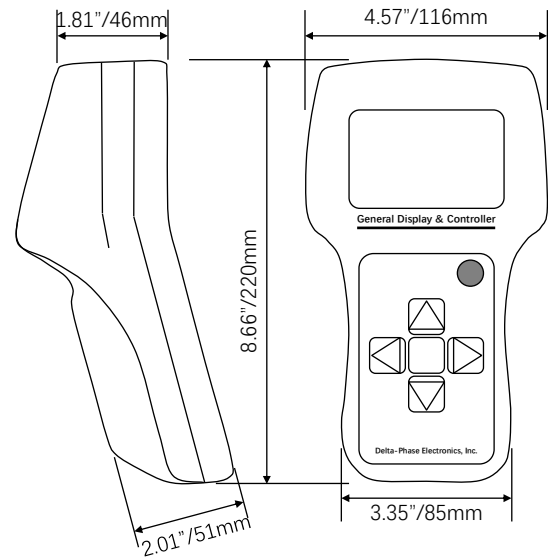
GDC-Ex



GDC-04/06/08



GDC-H



# GENERAL DISPLAY & CONTROLLER



## ORDER CODE

GDC General Display & Controller					
<b>Model and Analogue Output Channels</b> -01 Single Channel    -02 Dual Channels -04 Four Channels    -06 Six Channels    -08 Eight Channels -H Handheld    -Ex Explosion-proof					
<b>Relay</b> ( <i>Not for GDC-H &amp; -LP</i> ) - Two SPDT Relays (Standard for GDC-01/02)    Four SPDT Relays (Standard for GDC-04/06/08) -R4 Four SPDT Relays (Optional for GDC-01/02) -R6 Six SPDT Relays (for GDC-04/06/08 only)    -R8 Eight SPDT (for GDC-04/06/08 only) <i>There is one common alarm relay for GDC-04/06/08</i>					
<b>Digital Interface</b> ( <i>Not for -LP except Hart</i> ) - Standard, RS485 Modbus RTU & Bluetooth -BP Profibus DP/PA    -BF FF    -HT HART -UB USB port for GDC-04/06/08 only -NI Network interface for GDC-04/06/08 only					
<b>Power Supply</b> -AC 100 to 240VAC, 50Hz/60Hz -DC 24VDC (18 to 36VDC) - For GDC-H, Rechargeable Battery only					
<b>Special Application</b> - None -ATM Atmosphere Compensation -AL Acousto-optic Alarm -WHL Water Head Lost -OCF Open Channel Flow Measurement -AVF Area/Velocity Flow Measurement					
<b>GDC</b>	<b>-04</b>	<b>-</b>	<b>-</b>	<b>-AC</b>	<b>-</b>



**DELTA-PHASE ELECTRONICS, INC.**  
 3 Peters Canyon Rd, Suite 100,  
 Irvine, CA 92606 U.S.A.  
 Phone: (949) 701-7728  
<http://www.delta-phase.us>