

**Flexible Data Interface**

**Reliable Field Signal Conversions**

**Greater Data Security**

## The L&J Engineering MCG 3200 Field Interface

### Standard Configuration

The MCG 3200 Field Interface Card Enclosure is a powerful, flexible interface that accepts data from standard serial devices via TTL, current loop, RS232, or RS 485 and outputs Tankway regulated field power and proper signal voltage levels. Moreover, since each field wiring branch can be isolated using the MCG 3200, a complete cable failure in one branch will not affect the remaining branches.

The MCG 3200 will also protect control room equipment from receiving misapplied power due to improper field wiring. The control room equipment is also protected against transient voltages from the field because of built-in surge suppression circuitry.

The MCG 3200 provides a 4-wire data highway for each field. Each FIC board has the capability of providing power and communication for up to 128 field devices (gauges, transmitters, RTU's etc). In addition to its standard use in the L&J system, the MCG 3200 can also be configured for other special applications. With the addition of "Intelligent Personality Boards," the MCG 3200 can perform calculations, conversions and signal conditioning functions independent of the main CPU.

### Intelligent Configuration

Other intelligent options allow the MCG 3200 Series to provide power and communication to L&J field devices, and an RS232 port using ASCII protocol for communication with a non L&J host computer. This allows the customer to integrate L&J field devices into an existing SCADA system without the cost of an additional computer. The intelligent MCG 3200 series can also be configured to communicate with non L&J gauges and field devices. This allows the customer to upgrade to an L&J system without replacing all of the existing gauges and field devices.

## Applications

**Expands MCG Inventory Management Systems**

**Communicates between MCG Field components and standard serial communications links**

**Used to take advantage of isolation and field splitting features**

## SPECIFICATIONS

Mounting Options: Table top cabinet  
19" rack mount

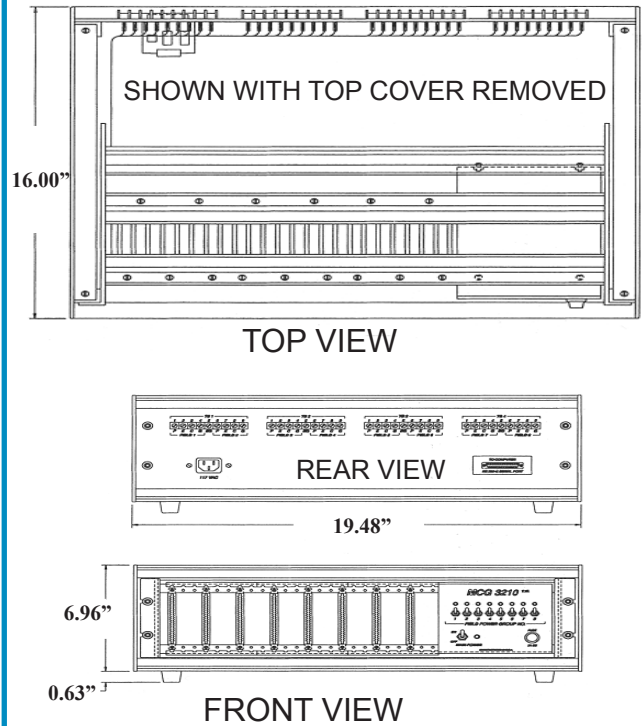
Communication Ports Available: 1 to 8

Communication Options: To computer- TTL, RS232C, Current Loop To field- L&J 4 wire Tankway

Power Source Options: 110 VAC Standard  
220 VAC Optional

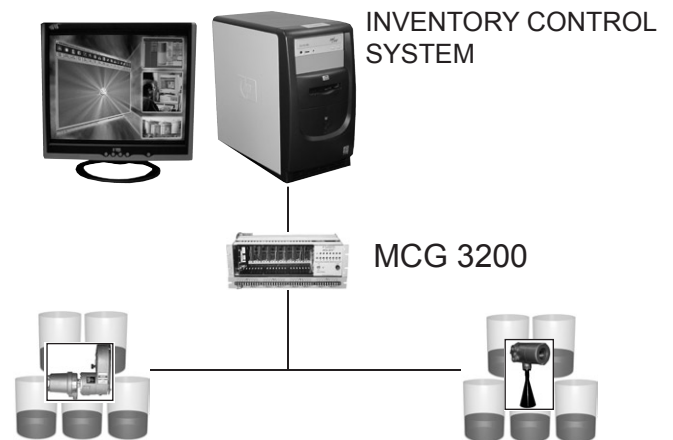
Dimensions: (table) 7"H x 19-1/2"W x 16"D  
(rack) 3"H x 19"W x 16"D

## DIMENSIONS



## INTELLIGENT INTERFACES AVAILABLE

<u>MODEL</u>	<u>PROTOCOL</u>
3230	NMC
3240	Varec Matrix
3241	Varec Direct Wire
3242	Varec 4-Wire
325X	GPE Series (TPII, 31422/23)
3260	Enraf
3270	Varec 15 Bit Parallel
3280	Mini-FIC (L&J Tankway)
3290	SAAB
3295	Sakura
32XX	Consult Factory



## INFORMATION REQUIRED TO ORDER:

**MCG 32XX - AB - CD - EF - GH - IJ**

NUMBER OF SLOTS \_\_\_\_\_

NUMBER OF FIC BOARDS \_\_\_\_\_

NUMBER OF PORTS \_\_\_\_\_

PORT TYPE \_\_\_\_\_

POWER \_\_\_\_\_

**MCG 3200 FIELD INTERFACE CARD ENCLOSURE**

Includes: Table top enclosure, 3 FIC slots, 1 port

**MCG 3210 FIELD INTERFACE CARD ENCLOSURE**

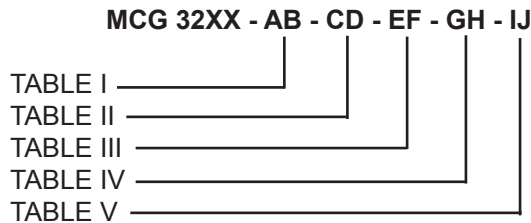
Includes: Rack mount, 3 FIC slots, 1 port

**MCG 3220 FIELD INTERFACE CARD ENCLOSURE**

Includes: Rack mount, 4 FIC slots, 1 port,  
1 personality board providing RS232 ASCII output

**MODEL NUMBER SELECTION:**

The model number has a base number, **MCG 32XX** followed by 10 digits.  
These digits represent 5 sets of option tables.



**TABLE I - NUMBER OF SLOTS**

- AB**
- 01** - 3 Slots
  - 02** - 4 Slots
  - 03** - 5 Slots
  - 04** - 6 Slots
  - 05** - 7 Slots
  - 06** - 8 Slots

**TABLE II - NUMBER OF FIC BOARDS**

- CD**
- 01** - 1 Board
  - 02** - 2 Boards
  - 03** - 3 Boards
  - 04** - 4 Boards
  - 05** - 5 Boards
  - 06** - 6 Boards
  - 07** - 7 Boards
  - 08** - 8 Boards

**TABLE III - NUMBER OF PORTS / CONNECTION TO THE COMPUTER**

- E**
- 0** - Standard TTL
  - 1** - TTL (For use with MCG 3400, MCG 3450, or MCG 3900)
  - 2** - TTL (For use with MCG 3800)
  - 3** - IPC TTL

- F**
- 1** - 1 Port
  - 2** - 2 Ports
  - 3** - 3 Ports
  - 4** - 4 Ports
  - 5** - 5 Ports
  - 6** - 6 Ports
  - 7** - 7 Ports
  - 8** - 8 Ports

**TABLE IV - PORT TYPE**

**GH**

- 00 - TTL Output
- 01 - RS 232 Output (Per Port)
- 02 - Current Loop (Per Port)
- 03 - RS 485 (Per Port)

**TABLE V - POWER**

**IJ**

- 01 - 110 VAC, 2 amp
- 02 - 220 VAC, 2 amp
- 03 - 110 VAC, 4 amp
- 04 - 220 VAC, 4 amp
- 05 - 110 VAC, 8 amp
- 06 - 220 VAC, 8 amp

**FIELD INTERFACE UNITS FOR EXISTING SYSTEMS:**

- MCG 3230 NMC Interface includes rack mount up to 100 devices
- MCG 3240 Varec Matrix Interface includes rack mount up to 100 devices
- MCG 3241 Varec Direct Wire includes rack mount up to 20 transmitters
- MCG 3242 Varec 4-wire includes rack mount up to 128 transmitters
- MCG 3251 GPE (for use with MCG 3900) includes rack mount up to 100 transmitters (TPII)
- MCG 3252 GPE (for use with MCG 3800) includes rack mount up to 100 transmitters (31422, 31423)
- MCG 3253 GPE (for use with MCG 3900) includes rack mount up to 100 transmitters (31422, 31423)
- MCG 3260 ENRAF
- MCG 3270 VAREC
- MCG 3290 SAAB
- MCG 3295 SAKURA