

## MCG 3221 Protocol Converter

### Standard Configuration

L&J Engineering offers the TDC 3000 PLCG compatible interface to help keep with the growing demands of the industrial world. The MCG 3221 is a microprocessor based device supporting bi-directional communications.

The communications between the MCG 3221 and the host system is tailored according to the requirements of the host system. The MCG 3221 is powered via an external 120 VAC transformer, included with the unit. The actual power requirements are 16 VAC. Standard protocols include but are not limited to Modbus PLCG and Modbus CLM.

### Improve Communications

Protocol emulations and interfaces to host computers via the microprocessor-based MCG 3221 Protocol Converter will ensure complete connectivity. Bi-directional communications allow the host (on or off-site) to send commands directly to the various L&J level gauges. This allows for on-demand verification of product level, interface level, product density, and equipment self-tests. Performance is optimized as background operation occurs to the inventory management system.

### Versatility

The MCG 3221 also has a "watchdog" feature. This internal system restarts the system processor in the case of a fatal error or system malfunction. One of the nicest features of the MCG 3221 is that L&J Engineering can accommodate whatever it is you may need. Most of the MCG 3221 PLCG Interfaces are custom made so that every requirement you have is fulfilled. The MCG 3221 L&J system adjusts to the way you do business now and the way you will do business tomorrow.



## Features

- Flexible Host System Interface
- Reliable Data Transfer
- Bi-Directional Communication

## Applications

- Host reads either discrete inputs or input registers, and outputs to output coils or output registers
- Communicates between the host system and L&J's Tankway measurement and control system

### Specifications:

#### Configuration:

Single Channel (Host/PLCG)  
Multi-Channel (Optional)

#### Data Memory:

Coils: 4096  
Input Status Points: 4096  
Holding Registers: 2048  
Input Registers: 2048

#### Interfacing:

Host Port Protocol: L&J  
PLCG Port Protocol: Modbus PLC  
Other Options available

#### Connections:

Host: RS232C, DB-25, 2 wire RS-485 Available  
"Tankway" Available  
PLCG: RS232C, DB-25, 2 wire RS-485 Available

#### Enclosure:

19" Back Mount or table top

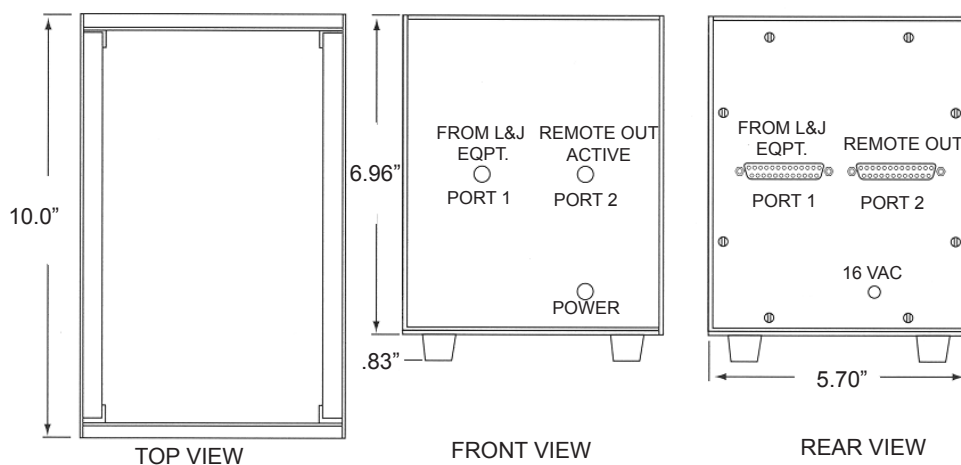
#### Power:

110 VAC 1 AMP STD  
220 VAC .5 AMP OPT

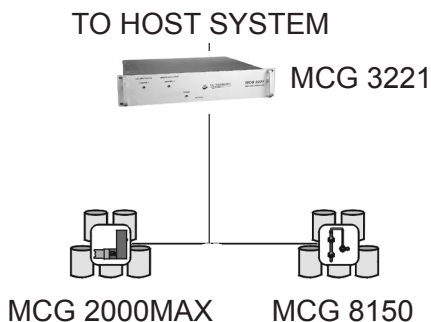
#### Power:

Gould Modbus Protocol, Standard PI-M  
Bus 300 Rev. B  
Honeywell TDC 3000 PLCG standard Rev. 3

### Dimensions



### Typical System Layout



All designs subject to change. Certified dimensions and specifications available upon request.

## MCG 3221 Ordering Guide

### MCG 3221 Protocol Converter

#### Model Number Selection:

The model number will consist of a base number **MCG 3221** followed by 10 digits. These digits will represent 5 sets of option tables:

**MCG 3221 - AB - CD - EF - GH - IJ**

AB - Number of Slots	
00	None
11	1 Channel/Rack
12	2 Channels/Rack
21	1 Channel/Table
22	2 Channels/Table
29	1 Channel/4 Field & Power/Rack
32	1 Channel/1 Field & Power/Rack
41	1 Channel Integral to 3900
42	2 Channels Integral to 3900

CD - Output Protocol	
02	Modbus (PLCG)
03	Allen Bradley
05	Rosemont HTG
06	Foxboro I/A Modbus Gateway
07	Modbus (PLCG) MCG 3900

EF - Output Communication Wiring	
11	RS-232
12	RS-485
13	Ethernet

GH - Power	
01	110 VAC
02	220 VAC

IJ - Quantity of Tanks (Software Capacity Only)	
01	0-24
02	25-74
03	75-149
04	150-225