



# CONNEX 3D™

## FLEXIBLE PROCESS METER



### DESCRIPTION

FLO-CORP's patent pending CONNEX 3D™ is the industry's first process meter that connects standard analog inputs which can be displayed and transmitted via RS-485 Modbus™ serial remote I/O with TCP/IP Ethernet, Auxiliary Relays and standard isolated analog output. The CONNEX 3D provides the user flexibility to configure any analog input into a stand-alone or distributed monitoring and control system. The system provides an innovative solution for simple single channel monitoring to multi-drop, multi-channel monitoring that communicates over a RS-485 Modbus™ data highway or TCP/IP Ethernet for peer-to-peer or Master-Client communications. The CONNEX 3D has the added dimension of wired or wireless monitoring with or without local or remote field display for added versatility. All configurations of the monitoring system are provided with either PC software or cloud-based web portal for monitoring, data gathering, data reporting, alarm alerting via SMS and email, alarm historian for post-mortem analysis. FLO-CORP's cost-saving hardware and software design provides process control and factory automation solutions so you can seamlessly switch from other analog or RS-485 transmitting devices to the new CONNEX 3D monitoring and control solution.

### FEATURES & BENEFITS

- RS-485 Field or Panel display interface, providing field and plant operations vital process information data
- Provides local and/or remote monitoring
- Simplify I/O management with innovative software
- Wide operating temperature range (-40 to 167°F)
- Monitor any number of analog inputs
- Supports Ethernet TCP/IP Network Connectivity
- Flow totalize and grand totalize with remote reset
- Ships from factory pre-configured for customer's application to ensure easy installation and setup
- 5 Year Warranty

## HOW THE CONNEX WORKS

The CONNEX 3D™ is a revolutionary concept in the process instrumentation market. It is flexible, versatile and adaptable due to the variety of modules that connect to each other. Think of the modules like Legos®, pick and choose from a wide variety of options that plug into your CONNEX 3D to create a unique system to fit your exact needs.

### MODULES\*

#### DISPLAY



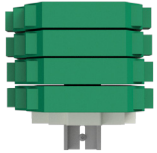
- Integral or Remote

#### CELLULAR



- Monitor applications wirelessly

#### ANALOG INPUTS



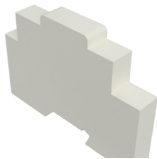
- Connect up to 4 analog inputs

#### USB DATA LOGGER



- Retrieve information directly from unit

#### AC INPUT



- 100-240 VAC,  
47-63Hz 0.3A

#### RELAY AND PUMP CONTROL



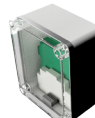
- 4 relay outputs

#### TCP/IP ETHERNET



- Enhance Communications

#### ENCLOSURE OPTIONS



- DIN Rail
- NEMA 4X
- Explosion Proof

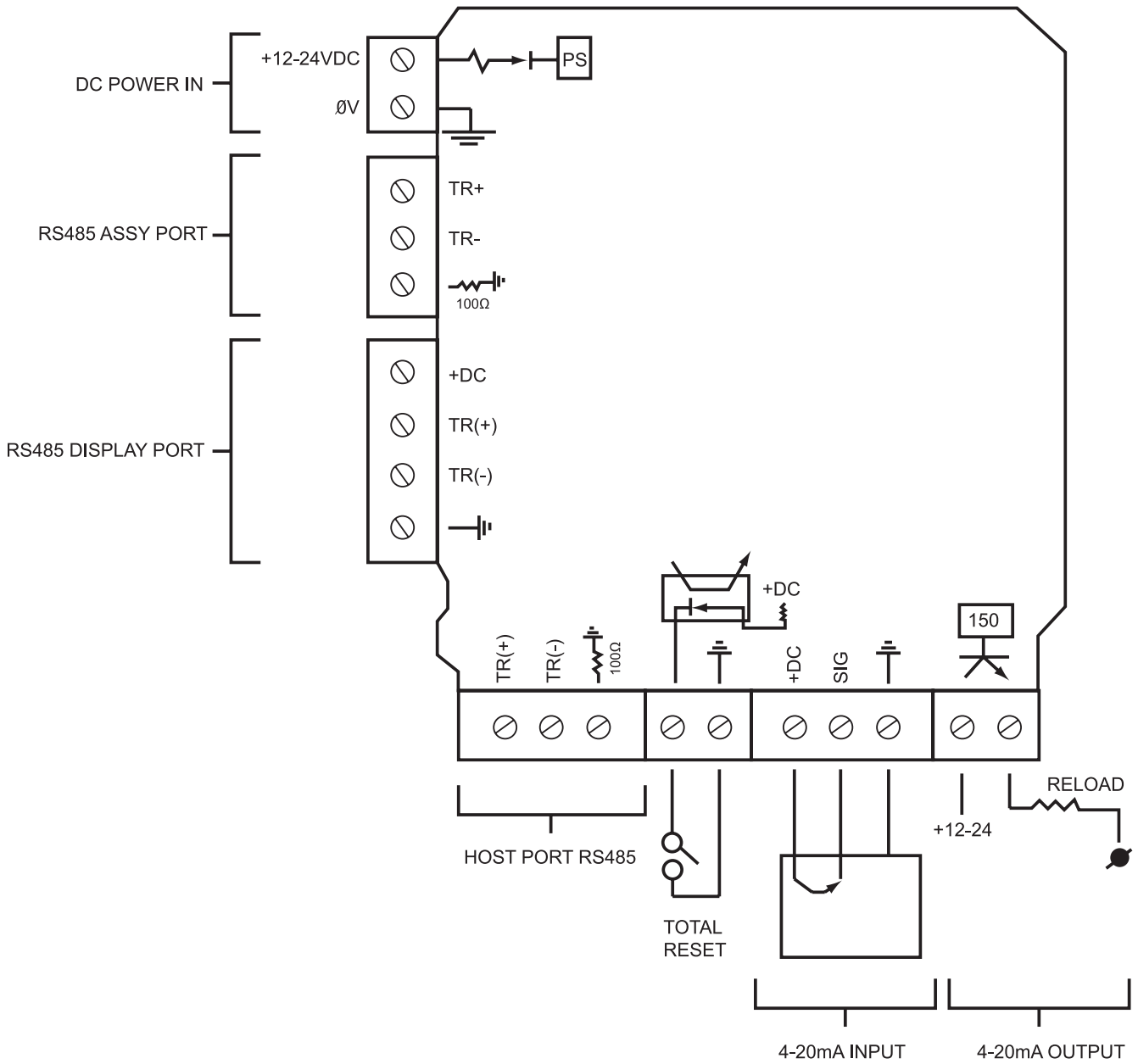
## SPECIFICATIONS

CONNEX 3D DIGITAL DISPLAY	
Display Type	6-digit, bright red LED
Display Units	Any - User Programmable
Decimal Point	Programmable up to 5 decimal places
Display Output	99999 to +999999
Display Height	0.6" (15mm)
Status Indicators	(1) Totalizer, Yellow LED (4) Input or Relay
Over Range Display	Display flashes O-Range -exceeds input value 4
User Interface	Sealed pushbuttons or DigaLink™ PC Interface
Password Protected	Yes
Accuracy	± 0.1% of calibrated span
Supply Voltage	10 to 28 VDC @ 0.5A Fuse Protected
Dimensions	1.772" x 4.272" x 2.717" (45 x 108.5 x 69mm)
Enclosure Type	Panel or Surface Mounting
Enclosure Rating	NEMA 4X
Enclosure Material	Anodize Aluminum and Acrylic
CONNEX 3D CPU SPECIFICATIONS	
Analog Input	1 channel
Isolation	Complete Analog Out
Resolution	12 Bits
I/O Mode	Voltage & Analog - Current
Input Range	4 to 20 mA
Accuracy	0.1%FSR @ 25±C, 0.5%FSR@ -40 and 75±C
Sampling Rate	1.5 samples / sec
Built-in Resistor for Current Input	240 ohms

Power Requirements	10-28 VDC
Analog Output	4-20mA isolated output
Transmitter Power Supply	10 to 30 VDC or 90 to 240 VAC 50/60 Hz
Serial	2
Interface	2 RS-485 with 3-wire terminal blocks
Parity	Non-Fixed
Data Bits	8
Stop Bits	1, 2
Baudrate	9600 to 921600
Protocols	Modbus RTU (Master, Slave)
PHYSICAL SPECIFICATIONS	
Wiring	I/O cable max. 16 AWG
Dimensions	1.09" x 4.88" x 3.31" (27.8 x 124 x 84mm)
Weight	Under .40lb (190g)
Mounting	DIN-rail or surface - NEMA 4X (XP optional)
Operating Temperature	40 to 185±F (-40 to 85±C)
Ambient Relative Humidity	5 to 95% (non-condensing)
Shock	IEC 60068-2-27
Vibration	IEC 60068-2-6
Safety	UL 508
EMC	EN 55022/24
EMI	CISPR 22, FCC Part 15B Class A
Green Product	RoHS, CRoHS, WEEE
Mean Time Between Failures	1,325,447 hrs
PROTECTION	
Warranty	5 Years

*Specifications are subject to change without notice.*

# CPU BOARD



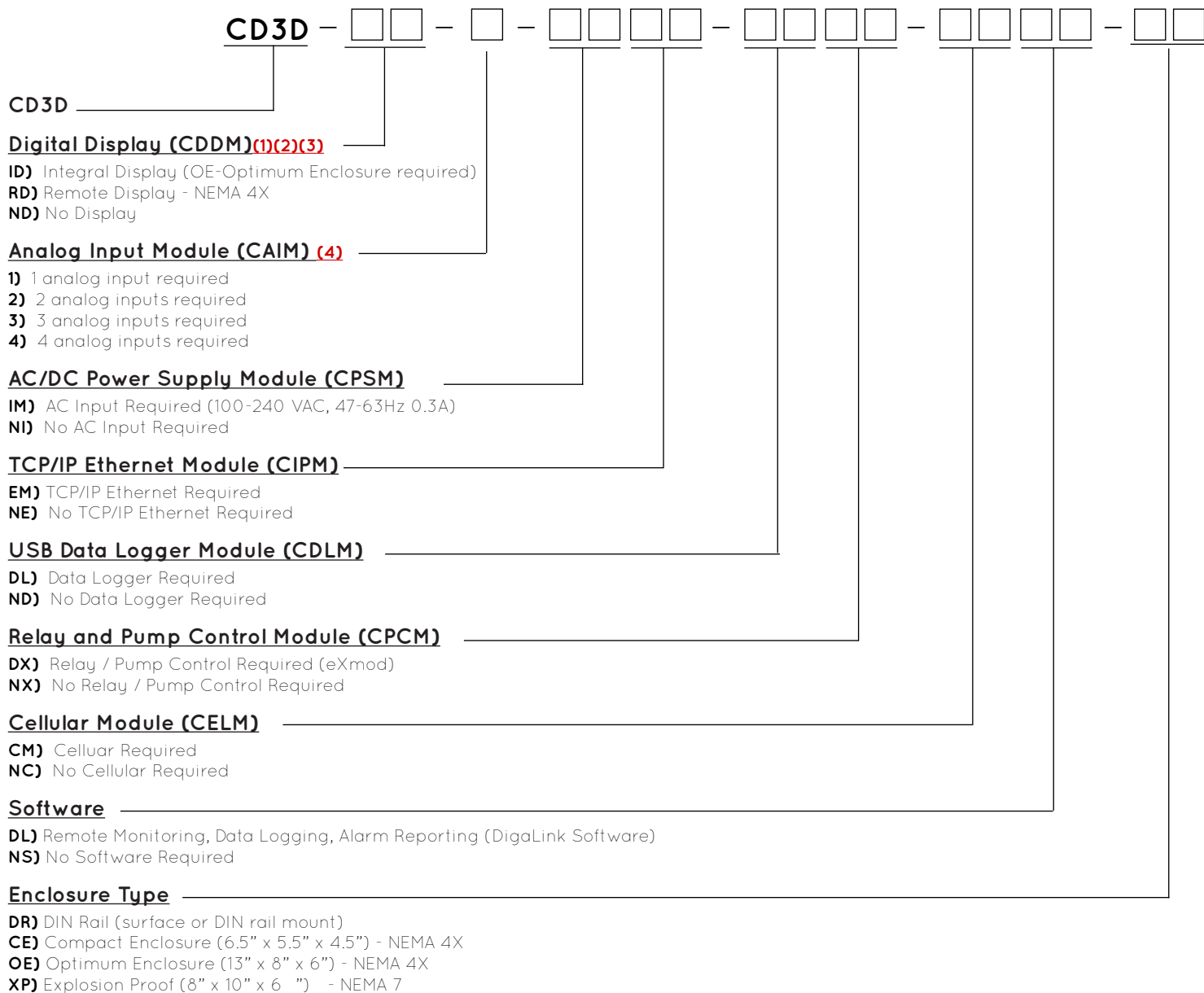
# Ordering Information

## FLO-CORP MODEL NUMBER BUILDER

For Assistance Call **877.356.5463**

Use the diagram below, working from left to right to construct your FLO-CORP Model Number. Simply match the category number to the corresponding box number.

**Example: CD3D-ID-3-IMEM-DLNX-NCDL-OE** CONNEX 3D™ CD3D with digital integral display, 3 analog inputs, AC input, with Ethernet TCP/IP, USB data logger, no relays, no cellular modem with remote monitoring software in an optimum NEMA 4X enclosure.



### Ordering Notes:

- (1) Select the best configuration based on your requirements
- (2) The Optimum Enclosure (OE) is required with the integral display
- (3) The four-digit part number is for the purpose of ordering spare module parts
- (4) If more than 2 analog inputs are needed, the Optimum Enclosure (OE) is required