

## LDP6-CDL10 Analog Output Option Card

INSTRUCTION SHEET

M4538-0408

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#### **DESCRIPTION**

This bulletin serves as a guide for the installation, configuration and operation of the Analog Output card. The analog output can be configured for 0 to 20 mA, 4 to 20 mA or 0-10 VDC. Only one range can be used at a time.

The meter can be fitted with up to three optional plug-in cards. The slot bays of the plug-in cards are dedicated to a particular card function. The plug-in card functions are: serial communications, analog output and setpoint output. Only one card from each function category can be installed.

#### INSTALLING AN OPTION CARD

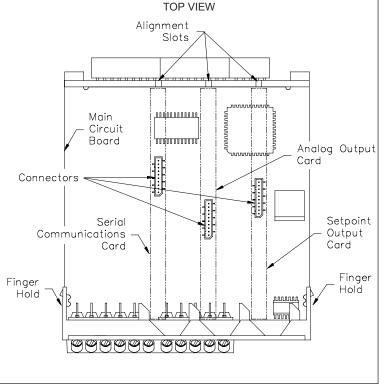


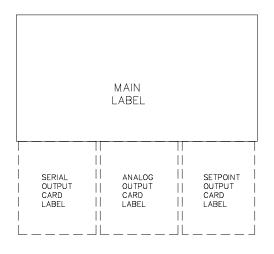
Caution: The option and main circuit cards contain static sensitive components. Before handling the cards, discharge static charges from your body by touching a grounded bare metal object. Ideally, handle the cards at a static controlled clean workstation. Also, only handle the cards by the edges. Dirt, oil or other contaminants that may contact the cards can adversely affect circuit operation.



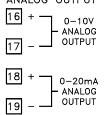
Warning: Exposed line voltage exists on the circuit boards. Remove all power to the meter AND load circuits before accessing the unit.

- Remove the main assembly from the rear of the case. Squeeze the finger holds on the rear cover, or use a small screwdriver to depress the side latches to release it from the case. It is not necessary to separate the rear cover from the main circuit card.
- Locate the option card connector for the type of option card to be installed. Hold the unit by the rear connector, not the display board, when installing an option card.
- 3. Install the option card by aligning the option card connector with the slot bay in the rear cover. The cards are keyed by position with different main board connector locations. Be sure the connector is fully engaged and the tab on the option card rests in the alignment slot on the display board.
- Slide the assembly back into the case. Be sure the rear cover latches fully into the case.
- 5. Apply the option card label to the bottom side of the meter. Do not cover the vents on the top surface of the meter. The surface of the case must be clean for the label to adhere properly. Apply the label to the area designated by the large case label.





#### ANALOG OUTPUT FIELD TERMINALS



#### **SPECIFICATIONS**

#### Analog Output Card

Types: 0 to 20 mA, 4 to 20 mA and 0 to 10 VDC

Isolation To Sensor & User Input Commons: 500 Vrms for 1 min. Working Voltage: 50 V. Not isolated from all other commons.

DP63700 Only:

Isolation To Sensor Common: 1400 Vrms for 1 min.

Working Voltage: 125 V

Isolation To User Input Common: 500 Vrms for 1 min.

Working Voltage: 50 V

Accuracy: 0.17% of FS (18 to 28°C); 0.4% of FS (0 to 50°C)

Resolution: 1/3500 Compliance:

10 VDC: 10 K $\Omega$  load min.

20 mA: 500 Ω load max. (self-powered)

Update Time: 200 msec. max. to within 99% of final readout value (digital

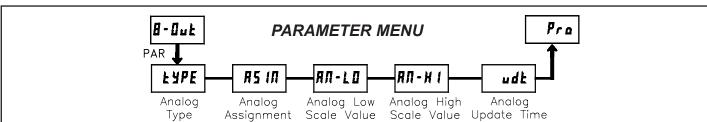
filter and internal zero correction disabled)

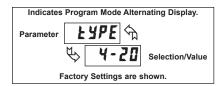
700 msec. max. (digital filter disabled, internal zero correction enabled)

DP63700 only: 1 sec. max. to within 99% of final readout value (digital filter

disabled)

#### MODULE 8 - Analog Output Parameters (8-8ut)





**ANALOG TYPE** 

SELECTION

0-20

4-20

0 - 10

#### **ANALOG LOW SCALE VALUE**



Enter the Display Value that corresponds to 0 mA (0-20 mA), 4 mA (4-20 mA) or 0 VDC (0-10 VDC).

- 19999 to 99999

#### **ANALOG HIGH SCALE VALUE**



- 19999 to 99999

**0.0** to **10.0** 

Enter the Display Value that corresponds to 20 mA (0-20 mA), 20 mA (4-20 mA) or 10 VDC (0-10 VDC).

#### ANALOG ASSIGNMENT



InP ŁoŁ H 1 LO

17. Only one range can be used at a time.

Enter the source for the analog output to retransmit:

RANGE

0 to 20 mA

4 to 20 mA

0 to 10 V Enter the analog output type. For 0-20 mA or 4-20 mA

use terminals 18 and 19. For 0-10 V use terminals 16 and

InP = Display Input Value

# ! = Maximum Display Input Value

LI = Minimum Display Input Value

**Lot** = Totalize Display Value

#### **ANALOG UPDATE TIME**



Enter the analog output update rate in seconds. A value of 0.0 allows the meter to update the analog output at a rate of 20/sec.

#### PROBE BURN-OUT ACTION (DP63500 ONLY)

LO



Enter the probe burn-out action. In the event of a temperature probe failure, the analog output can be programmed for low or high scale.

H !

#### WARRANTY/DISCLAIMER

OMEGA ENGINEERING, INC. warrants this unit to be free of defects in materials and workmanship for a period of **25 months** from date of purchase. OMEGA's WARRANTY adds an additional one (1) month grace period to the normal **two (2) year product warranty** to cover handling and shipping time. This ensures that OMEGA's customers receive maximum coverage on each product.

If the unit malfunctions, it must be returned to the factory for evaluation. OMEGA's Customer Service Department will issue an Authorized Return (AR) number immediately upon phone or written request. Upon examination by OMEGA, if the unit is found to be defective, it will be repaired or replaced at no charge. OMEGA's WARRANTY does not apply to defects resulting from any action of the purchaser, including but not limited to mishandling, improper interfacing, operation outside of design limits, improper repair, or unauthorized modification. This WARRANTY is VOID if the unit shows evidence of having been tampered with or shows evidence of having been damaged as a result of excessive corrosion; or current, heat, moisture or vibration; improper specification; misapplication; misuse or other operating conditions outside of OMEGA's control. Components in which wear is not warranted, include but are not limited to contact points, fuses, and triacs.

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Direct all warranty and repair requests/inquiries to the OMEGA Customer Service Department. BEFORE RETURNING ANY PRODUCT(S) TO OMEGA, PURCHASER MUST OBTAIN AN AUTHORIZED RETURN (AR) NUMBER FROM OMEGA'S CUSTOMER SERVICE DEPARTMENT (IN ORDER TO AVOID PROCESSING DELAYS). The assigned AR number should then be marked on the outside of the return package and on any correspondence.

The purchaser is responsible for shipping charges, freight, insurance and proper packaging to prevent breakage in transit.

FOR **WARRANTY** RETURNS, please have the following information available BEFORE contacting OMEGA:

- 1. Purchase Order number under which the product was PURCHASED,
- Model and serial number of the product under warranty, and
- 3. Repair instructions and/or specific problems relative to the product.

FOR **NON-WARRANTY** REPAIRS, consult OMEGA for current repair charges. Have the following information available BEFORE contacting OMEGA:

- 1. Purchase Order number to cover the COST of the repair,
- 2. Model and serial number of the product, and
- 3. Repair instructions and/or specific problems relative to the product.

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