

DIGITAL INPUT EXPANSION MODULE

PRODUCT DEFINATION

The DEM Series Expansion Module provides digital Inputs using a specific resistor-to-resistor network connected to Universal Input. The DEM expander allows a single universal input (with capability to measure resistance between 700 Ohm to 1600 Ohm) to monitor the status of up to five dry contacts.

FEATURES

Low On Resistance MOSFET Driven

External dry contact is driven by Low On Resistance $\ensuremath{\mathsf{MOSFET}}$ to ensure precision.

Input Diagnosis

Built-in internal jumpers to diagnose the input functionality.

Relay Drive

External dry contact is driven by relay supports higher impendence load.

Status Indicator

Built-in power and input LEDs indication and diagnostic purpose.

REFERENCE TABLE

DI1	DI2	DI3	DI4	DI5	Nom	Min	Max
Over Range					> 1596	1563	-
0	0	0	0	0	1557.9	1552.9	1562.9
0	0	0	0	1	1533.0	1528.0	1538.0
0	0	0	1	0	1507.9	1502.9	1512.9
0	0	0	1	1	1483.0	1478.0	1488.0
0	0	1	0	0	1457.9	1452.9	1462.9
0	0	1	0	1	1433.0	1428.0	1438.0
0	0	1	1	0	1407.9	1402.9	1412.9
0	0	1	1	1	1383.0	1378.0	1388.0
0	1	0	0	0	1356.9	1351.9	1361.9
0	1	0	0	1	1332.0	1327.0	1337.0
0	1	0	1	0	1306.9	1301.9	1311.9
0	1	0	1	1	1282.0	1277.0	1287.0
0	1	1	0	0	1256.9	1251.9	1261.9
0	1	1	0	1	1232.0	1227.0	1237.0
0	1	1	1	0	1206.9	1201.9	1211.9
0	1	1	1	1	1182.0	1177.0	1187.0
1	0	0	0	0	1154.9	1149.9	1159.9
1	0	0	0	1	1130.0	1125.0	1135.0
1	0	0	1	0	1104.9	1099.9	1109.9
1	0	0	1	1	1080.0	1075.0	1085.0
1	0	1	0	0	1054.9	1049.9	1059.9
1	0	1	0	1	1030.0	1025.0	1035.0
1	0	1	1	0	1004.9	999.9	1009.9
1	0	1	1	1	980.0	975.0	985.0
1	1	0	0	0	953.9	948.9	958.9
1	1	0	0	1	929.0	924.0	934.0
1	1	0	1	0	903.9	898.9	908.9
1	1	0	1	1	879.0	874.0	884.0
1	1	1	0	0	853.9	848.9	858.9
1	1	1	0	1	829.0	824.0	834.0
1	1	1	1	0	803.9	798.9	808.9
1	1	1	1	1	779.0	774.0	784.0
Under Range					< 741	0	773.9
OLL cais: 0 = Switch Open 1 = Switch Closed							

DI Logic: 0 = Switch Open 1 = Switch Closed







DEM5



Digital Input:

• 5 Channels

o Limit: +25VDC at 500 Ohm Resistance maximum

Analogue Output:

• 1 Channel

o Resistance: 700 - 1600 Ohm, Normal Operation Range

Supply Connection & Environmental Limits

Power Supply: 24VAC +/- 5%, 1.2VA max, or (22~26) +/- 5%VDC

Consumption: 50mA max @ 24VDC

Operating Temperature: 32° to 150° F (0° to 65° C)

Storage Temperature: -4° to 150° F (-20° to 65° C)

Operating Humidity: 10% to 95% relative humidity non-

condensing

Mechanical

- Dimension: 132mm (L) x 80mm (W) x 38mm (H)
- Material: ABS



DEM10

Technical Specification

Digital Input:

• 10 Channels

o Limit: +25VDC at 500 Ohm Resistance Maximum

Analogue Output:

• 2 Channel

o Resistance: 700 - 1600 Ohm, Normal Operation Range

Supply Connection & Environmental Limits

Power Supply: 24VAC +/- 5%, 1.2VA max, or (22~26) +/- 5%VDC

Consumption: 50mA max @ 24VDC

Operating Temperature: 32° to 150° F (0° to 65° C)

Storage Temperature: -4° to 150° F (-20° to 65° C)

Operating Humidity: 10% to 95% relative humidity non-condensing

Mechanical

- Dimension: 132mm (L) x 80mm (W) x 38mm (H)
- Material: ABS

