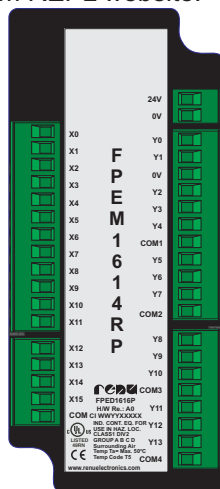


Models:
FPEM1614RP
FlexiPanels FP3 series expansion models

INSTRUCTION SHEET

Thank you for purchasing FlexiPanels series analog expansion model FPEM1614RP. Please read the instruction sheet and thoroughly familiarize yourself with the functions and characteristics of the products before use.

For more information, please refer user manual which will be available in FlexiSoft software help and/or you can download from REPL website.



Specifications:

Power Supply
Voltage Rating: 24 VDC +/-15%, 12V from base
Power Rating:
Output/ Channel: 250mA @ 24VDC and 2A @ 230 VAC
Approvals:
CE, UL

Digital Inputs:
16 Inputs Bi-directional Type
(Within which 2 pairs are high speed)

Input Design:
According to EN 61131-2 Type 1
Min. ON Voltage 15 VDC
Max. ON Voltage 30 VDC
Min.OFF Voltage -3VDC
Max. OFF Voltage 5 VDC
Nominal input voltage 24 VDC
Nominal input current 5mA typical
Isolation Optically isolated from internal circuit., High isolation

Input Impedance
Turn OFF time
Turn ON time

voltage(BV= 3.7KV)
3k Ohm
10msec
10msec

High Speed Inputs:
No. of HS inputs:
Max. i/p frequency:
Max. i/p count:

2 pairs, X0-X1, X2-X3
200kHz
42949672965

Digital Outputs:

2 PNP type transistor outputs
(2 PWM o/p) and
12 Relay type outputs
22VDC
30VDC
0.2VDC
1VDC
30VDC
300mA Typ./channel
Optically isolated from internal circuit., High isolation voltage
(BV = 3.7 KV)
Yes
96ohms/6W (resistive) @
24VDC 6VA (inductive, unity
power factor)

Short Circuit protection
Nominal load

High Speed Outputs:
No. Of HS outputs:
Max. O/p frequency:
Frequency step:
PWM duty cycle:
Duty cycle step:

2, Y0 and Y1
1kHz
1Hz
0 to100%
1%

General:

Operating Temperature: **0 to 60°C.
Storage Temperature: -20 to 85°C.
Operating Humidity: 10% to 90% (Non condensing)
Mechanical Dimension: 48mm x 108mm x 41mm
(W x H x D)

Weight:

****Operating temperature: For UL 0 to 50 °C.**

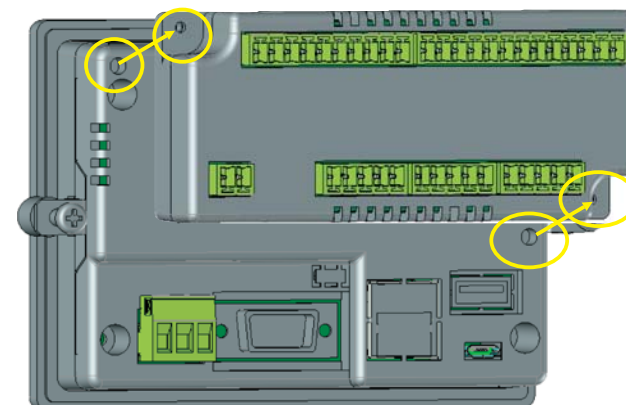
Mounting Details:

Mounting with base models:

With the expansions, while unpacking the unit, user will find 2 screws already attached with base bottom case. Fix the expansion with the HMI as shown below with these screws. Expansion connector will also be fixed with the expansion female connector given on base HMI.

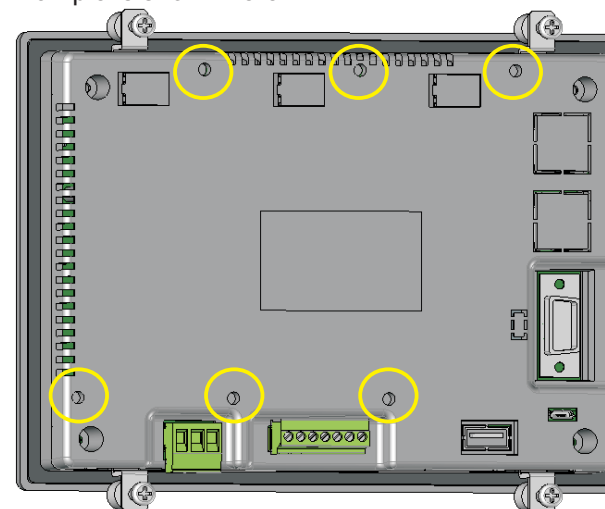
Apply torque 0.1Nm while fixing with base unit.

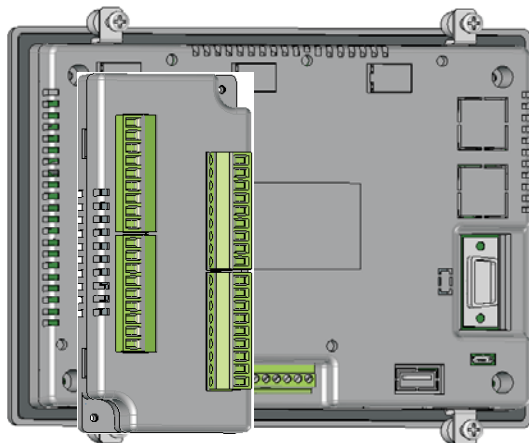
Mounting with FP3043TN-E and FP3043T-E models:



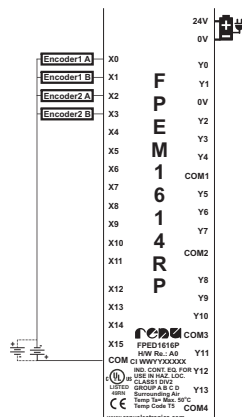
For 7" and 10.2" HMI models, the procedure of mounting expansions is same. Only instead of horizontal mounting, expansions will mount in vertical directions.

Hence accordingly these base are having facility to add 3 and 5 expansions at a time respectively. Example is shown here.

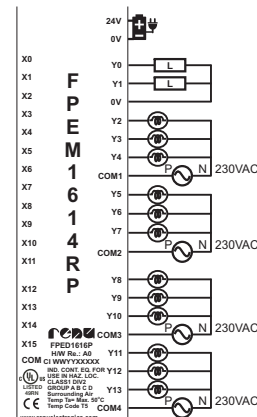




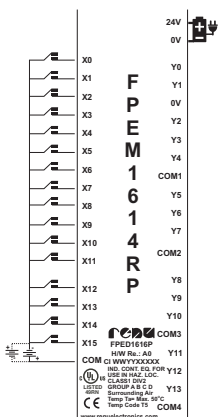
Quadrature:



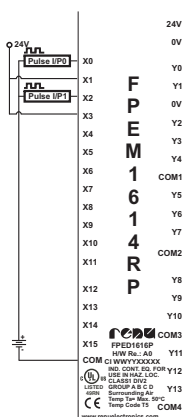
Digital output:



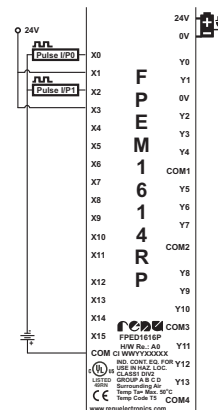
Wiring Diagram:
Digital Inputs:



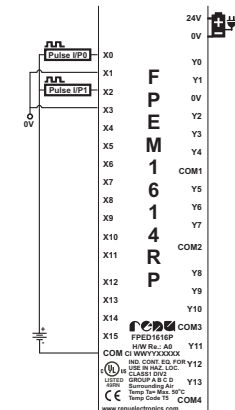
HSC Single phase up
counter



HSC Single phase down
counter



HSC Single phase down
counter



This equipment is suitable for use in Class I, Division 2, Groups A, B, C and D or non-hazardous locations only.

WARNING – EXPLOSION HAZARD – Do not disconnect equipment unless power has been removed or the area is known to be non-hazardous.

WARNING – EXPLOSION HAZARD - Substitution of components may impair suitability for Class I, Division 2.

WARNING - CAUTION, Battery May Explode If Mistreated. Do Not Recharge, Disassemble Or Dispose Of In Fire.

The list of materials used in the construction of these devices with name of sealed device - generic name of the material and the supplier's name and type designation.

A recommendation for the user to periodically inspect the sealed devices used, for any degradation of properties and replace if degradation is found.

Technical Support:

For Technical support please contact factory along with the unit serial number and revision number written on the address sticker of the unit. Also provide information of the application used. Usually, including your application also provides a lot of help. If possible e-mail the application to factory.

MANUAL REVISIONS:

Rev. No.	Date	Description
1.00	31/01/17	First Draft