

FlexiPanels®

HMI OR HMI + Pluggable I/O

FP5121
12.1" TFT Color Touch Screen

FP5070
7" TFT Color Touch Screen

FP5043
4.3" TFT Color Touch Screen

FP4030MT
3" Multicolor Touch Screen



FP4057
5.7" TFT Color Touch Screen

FP4035
3.5" TFT Color Touch Screen

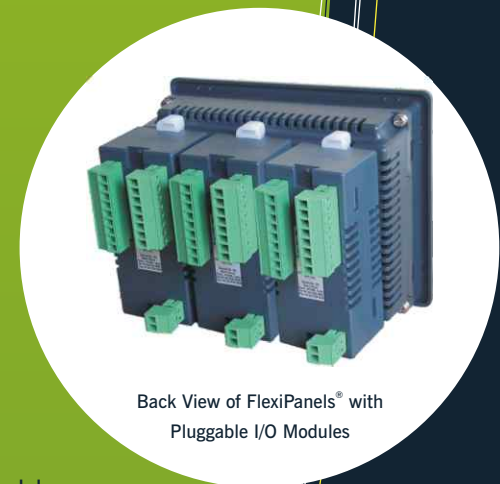
FP4030
3.1" Multicolor LCD

FP4020
16 x 2 Multicolor LCD



Salient Features :-

- 16 x 2 Text to 12.1" Graphical Touchscreen Monochrome / TFT Color Display
- Models available as only HMI or HMI + Pluggable Digital and Analog I/O Modules
- Communication Ports:
 - One / Two serial ports to connect PLC at RS232 / 422 / 485 levels / Printer / Programming Port
 - One USB (Device) port as Programming Monitoring Port
 - One USB (Host) port to connect USB memory drive*
 - One optional Ethernet port (10/100 Mbps. Modbus TCP/IP)*
- Support for Digital I/O (OC / Relays)
- Analog inputs for TC, RTD, mA, mV, 0 to 5 VDC, 0 to 10 VDC, -10 to +10VDC
- Analog outputs for 0-10 VDC / 4-20 mA
- High Speed Counters and Timers
- Support for Quadrature inputs and PWM output
- Floating point and Dual Port communication supported
- Ladder editor with powerful instruction set
- Support for Recipes and 32K color Bitmaps for color LCD Models
- Data Logging, Transfer logged data on USB memory drive*
- Alarms and Trending (Real Time and Historical), RTC
- IP66 design. CE, UL approved. RoHS compliant
- Multilanguage (Unicode) support with true type Windows® fonts for graphical models
- Common Programming software for the entire FlexiPanels® family.....FREE!!



Back View of FlexiPanels® with Pluggable I/O Modules

*Not supported in FP4020, FP4030 models

Automation Simplified

Specifications

Power : + 24V DC \pm 15%
 Bezel : IP66 rated Keypad / Touch Screen
 Operating Temperature : 0° to 50°C
 Storage Temperature : -20° to 80°C
 Humidity : 10% to 85% (Non condensing)
 Communication Ports : One / Two serial ports (RS232 / RS422 / RS485 levels supported)

USB Device Port : As programming and monitoring port
 USB Host port : Supports USB Memory drive
 Type of LCD : Mono / TFT Color Touch Screen
 Supported Colors : 32K for Color TFT LCD
 Isolation : Isolation between communication ports, power and I/O (if applicable) is 500 V DC for 1 Min.

Immunity to ESD : as per IEC61000-4-2
 Immunity to Fast Transients : as per IEC61000-4-4
 Immunity to Radiated electromagnetic field : as per IEC61000-4-3
 Immunity to Conducted disturbances : as per IEC61000-4-6
 Surge : as per IEC61000-4-5
 Radiated emission : as per EN55011

Model Comparison

Product	Model	Display	LCD Life at 25°C	Keys / TS	Memory	Screen Memory	Local I/O	Expansion	Serial Ports	USB	Ethernet Port	Power	Weight (Approx.)	Bezel Dimensions W x H x D (mm)	Panel Cutout W x H (mm)
FP4020	FP4020MR	16x2 Text Multicolor backlight	40000 hrs	18 / No	512 k	84 kB	NA	NA	1	Device	No	2W	172 gms.	109 x 71 x 53	99.5 x 62.5
	FP4020MR-L0808N	16x2 Text Multicolor backlight	40000 hrs	18 / No	512 k	84 kB	8 DC in 8 NPN 0.5A	NA	1	Device	No	2W	215 gms.	109 x 71 x 53	99.5 x 62.5
	FP4020MR-L0808P	16x2 Text Multicolor backlight	40000 hrs	18 / No	512 k	84 kB	8 DC in 8 PNP 0.5A	NA	1	Device	No	2W	215 gms.	109 x 71 x 53	99.5 x 62.5
	FP4020MR-L0808R	16x2 Text Multicolor backlight	40000 hrs	18 / No	512 k	84 kB	8 DC in 6 Relays 2A 2 NPN 0.5A	NA	1	Device	No	2W	220 gms.	109 x 71 x 53	99.5 x 62.5
FP4030	FP4030MR	128x64 Graphical Multicolor backlight	30000 hrs	18 / No	1.5 MB	1 MB	NA	NA	1	Device	No	3W	255 gms.	128 x 110 x 45	119 x 93
	FP4030MR-L1208R	128x64 Graphical Multicolor backlight	30000 hrs	18 / No	1.5 MB	1 MB	12 DC in 6 Relays 2A 2 NPN 0.5A	NA	1	Device	No	3W	320 gms.	128 x 110 x 60	119 x 93
	FP4030MR-E	128x64 Graphical Multicolor backlight	30000 hrs	18 / No	1.5 MB	1 MB	NA	3	1	Device	No	3W	265 gms.	128 x 110 x 45	119 x 93
FP4030MT	FP4030MT	128x64 3" Multicolor Backlight	30000 hrs	No / Yes	1.5 MB	1 MB	NA	NA	2**	Device	No	3W	156 gms.	109 x 71 x 35	99.5 x 62.5
FP4035	FP4035T	320x240 QVGA 3.5" Color TFT	50000 hrs	6 / Yes	8 MB	Up-to 6 MB	NA	NA	1	Device and Host	No	3W	275 gms.	128 x 110 x 45	119 x 93
	FP4035TN	320x240 QVGA 3.5" Color TFT	50000 hrs	6 / Yes	8 MB	Up-to 6 MB	NA	NA	1	Device and Host	Yes	3W	275 gms.	128 x 110 x 45	119 x 93
	FP4035T-E	320x240 QVGA 3.5" Color TFT	50000 hrs	6 / Yes	8 MB	Up-to 6 MB	NA	3	1	Device and Host	No	4W	285 gms.	128 x 110 x 45	119 x 93
	FP4035TN-E	320x240 QVGA 3.5" Color TFT	50000 hrs	6 / Yes	8 MB	Up-to 6 MB	NA	3	1	Device and Host	Yes	4W	285 gms.	128 x 110 x 45	119 x 93
FP5043	FP5043T	480x272 WQVGA 4.3" Color TFT	30000 hrs	No / Yes	Up-to 14 MB	Up-to 10 MB	NA	NA	2**	Device and Host	No	5W	320 gms.	128 x 110 x 45	119 x 93
	FP5043TN	480x272 WQVGA 4.3" Color TFT	30000 hrs	No / Yes	Up-to 14 MB	Up-to 10 MB	NA	NA	2**	Device and Host	Yes	5W	320 gms.	128 x 110 x 45	119 x 93
	FP5043T-E	480x272 WQVGA 4.3" Color TFT	30000 hrs	No / Yes	Up-to 14 MB	Up-to 10 MB	NA	3	2**	Device and Host	No	6W	330 gms.	128 x 110 x 45	119 x 93
	FP5043TN-E	480x272 WQVGA 4.3" Color TFT	30000 hrs	No / Yes	Up-to 14 MB	Up-to 10 MB	NA	3	2**	Device and Host	Yes	6W	330 gms.	128 x 110 x 45	119 x 93
FP4057	FP4057T	320x240 QVGA 5.7" Color TFT	60000 hrs	6 / Yes	8 MB	Up-to 6 MB	NA	NA	2	Device and Host	No	7W	690 gms.	195 x 150 x 50	184.3 x 131.3
	FP4057TN	320x240 QVGA 5.7" Color TFT	60000 hrs	6 / Yes	8 MB	Up-to 6 MB	NA	NA	2	Device and Host	Yes	7W	690 gms.	195 x 150 x 50	184.3 x 131.3
	FP4057T-E	320x240 QVGA 5.7" Color TFT	60000 hrs	6 / Yes	8 MB	Up-to 6 MB	NA	5	2	Device and Host	No	10W	710 gms.	195 x 150 x 50	184.3 x 131.3
	FP4057TN-E	320x240 QVGA 5.7" Color TFT	60000 hrs	6 / Yes	8 MB	Up-to 6 MB	NA	5	2	Device and Host	Yes	10W	710 gms.	195 x 150 x 50	184.3 x 131.3
FP5070	FP5070T	800x480 WVGA 7" Color TFT	30000 hrs	No / Yes	Up-to 14 MB	Up-to 10 MB	NA	NA	2	Device and Host	No	9W	610 gms.	195 x 150 x 50	184.3 x 131.3
	FP5070TN	800x480 WVGA 7" Color TFT	30000 hrs	No / Yes	Up-to 14 MB	Up-to 10 MB	NA	NA	2	Device and Host	Yes	9W	610 gms.	195 x 150 x 50	184.3 x 131.3
	FP5070T-E	800x480 WVGA 7" Color TFT	30000 hrs	No / Yes	Up-to 14 MB	Up-to 10 MB	NA	5	2	Device and Host	No	9W	620 gms.	195 x 150 x 50	184.3 x 131.3
	FP5070TN-E	800x480 WVGA 7" Color TFT	30000 hrs	No / Yes	Up-to 14 MB	Up-to 10 MB	NA	5	2	Device and Host	Yes	9W	620 gms.	195 x 150 x 50	184.3 x 131.3
FP5121	FP5121T	800x600 SVGA 12.1" Color TFT	70000 hrs	No / Yes	Up-to 14 MB	Up-to 10 MB	NA	NA	2	Device and Host	No	16W	1.680 Kg	312 x 246 x 48	293.5 x 226.2
	FP5121TN	800x600 SVGA 12.1" Color TFT	70000 hrs	No / Yes	Up-to 14 MB	Up-to 10 MB	NA	NA	2	Device and Host	Yes	16W	1.680 Kg	312 x 246 x 48	293.5 x 226.2

Pluggable Expansion Modules (Digital I/O)		Power Consumption	Weight (Approx.)	Dimensions (mm)
FPED0808P	8 Digital inputs (PNP or NPN) and 8 outputs (0.5A PNP transistor)	0.3 W	70 gms.	36 W x 79 H x 45 D
FPED-HS-0808P*	8 Digital inputs and 8 Digital Outputs (PNP Type)	0.3 W	70 gms.	36 W x 79 H x 45 D
FPED0808N	8 Digital inputs (PNP or NPN) and 8 outputs (0.5A NPN transistor)	0.3 W	70 gms.	36 W x 79 H x 45 D
FPED-HS-0808N*	8 Digital inputs and 8 Digital Outputs (NPN Type)	0.3 W	70 gms.	36 W x 79 H x 45 D
FPED0012R	12 Digital outputs (Relay)	0.3 W	90 gms.	36 W x 79 H x 45 D
FPED1600	16 Digital inputs	0.3 W	65 gms.	36 W x 79 H x 45 D
FPED0016N	16 Digital outputs (0.5A NPN transistor)	0.3 W	65 gms.	36 W x 79 H x 45 D
FPED0016P	16 Digital outputs (0.5A PNP transistor)	0.3 W	75 gms.	36 W x 79 H x 45 D
FPED-HS-0808RP	8 Digital inputs (PNP or NPN) and 8 outputs (6 Relay, 2 PNP)	0.3 W	70 gms.	36 W x 79 H x 45 D
FPED-HS-0808RN	8 Digital inputs (PNP or NPN) and 8 outputs (6 Relay, 2 NPN)	0.3 W	70 gms.	36 W x 79 H x 45 D

Pluggable Expansion Modules (Analog I/O)		Power Consumption	Weight (Approx.)	Dimensions (mm)
FPEA0202L	2 Analog inputs (4-20mA, 0 – 20mA, 0 – 10 V, -10 to + 10V ranges) 2 Analog Outputs (4-20mA, 0 – 20mA, 0 – 10 V)	0.3 W	85 gms.	36 W x 79 H x 45 D
FPEA0400L	4 Analog inputs (4-20mA, 0 – 20mA, 0 – 10 V, -10 to + 10V ranges)	0.3 W	80 gms.	36 W x 79 H x 45 D
FPEA-0402U-16	4 Universal Analog Inputs (4-20mA, 0 – 20mA, TC, RTD, 0-5V, 0 – 10 V, 0-50mV, 0 - 100mv ranges) 2 Analog Outputs (4-20mA, 0 – 20mA, 0 – 10 V). All AI/O 16 bit resolution	0.3 W	90 gms.	36 W x 79 H x 45 D
FPEA0800LC	8 Analog inputs (4-20mA)	0.3 W	90 gms.	36 W x 79 H x 45 D
FPEA0800LV	8 Analog inputs (0-10VDC)	0.3 W	90 gms.	36 W x 79 H x 45 D

4 inputs can be configured as high speed inputs (25KHz) and 2 outputs can be configured for PWM (10 KHz) or 1 quadrature input of 20KHz or 2 quadrature inputs of 5 KHz.

** One "D" type port that supports RS232 and RS485 levels on different pins. "Y" type cable can be used for separate RS232 and RS485 levels simultaneously.



HEAD OFFICE

Survey No. 2/6, Baner Road, Pune - 411045, India.
 Tel : +91 20 2729 2840 Fax : +91 20 2729 2839
 Email : info@renuelectronics.com
 Website: www.renuelectronics.com

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