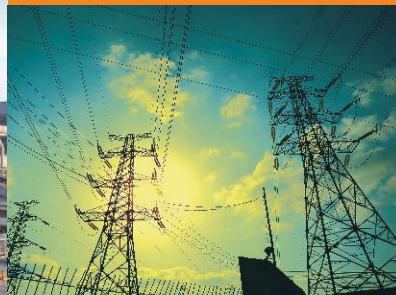




FACTORY AUTOMATION



FlexiPanels - HMI
FlexiPanels - HMI with I/O
FlexiLogics - Modular PLC
Gateway - Protocol Converters
Field I/O - Analog and Digital

Automation Simplified▶.....



Renu Electronics offers products for Factory Floor Automation.

Renu Electronics is a pioneer in designing and manufacturing of Factory Automation products like a wide range of Text and Touch Screen based HMI, Programmable Logic Controllers (PLC), HMI with built-in PLC, Technology based Protocol Converters, Analog and Digital Field I/O, SCADA, Signal converters and Repeaters, Port Multiplexers, Flow products and many more.

Renu Electronics is an ISO 9001:2008 and ISO 14001:2004 certified company and proud to be one of the few RoHS compliant manufacturing organizations in India. All the products are designed to meet CE, UL Class 1 Div 2 listings. Renu Electronics' Global Sales and Support channel provide prompt and valuable support to its esteemed business associates.

FlexiPanels® - FP3 Series

FlexiPanels® - FP3 Series HMI

Key Features

- ▶ 3.5" to 10.2" Graphical Touch Screen TFT Color Display
- ▶ New attractive slim housing
- ▶ Floating point support, Bar graph, Built-in RTC
- ▶ Ladder editor with powerful instruction set*
- ▶ Two serial communication ports (one RS232, one RS232/RS485)
- ▶ One USB (device) port for programming
- ▶ One USB (Host) port to connect memory drive*
- ▶ One optional Ethernet port (10/100 Mbps. Modbus TCP/IP)*
- ▶ Supports Horizontal and Vertical display orientation
- ▶ Large Application memory
- ▶ Data Logging, Transfer logged data on USB memory drive*
- ▶ Alarms (Real Time & Historical)
- ▶ Trending (Real Time & Historical)
- ▶ Multilanguage (Unicode) support with true type Windows® fonts
- ▶ IP66 design. CE, UL Class I Div 2 approved. RoHS compliant
- ▶ Common Programming software for the entire FlexiPanels® family.. FREE!!

*Not supported in FP3035 model



FP3102
10.2" WGA Color TFT



FP3035
3.5" HVGA Color TFT



FP3043
4.3" WQVGA Color TFT



FP3070
7" WGA Color TFT



FP4020



16 x 2 Multicolor LCD with built-in Digital I/O



FP4030MT



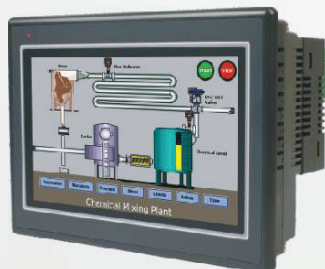
3" Mono Touch Screen Multicolor Backlight with built-in Digital and Analog I/O



FP5043



4.3" Color TFT with Pluggable I/O Modules



FP5070



7" Color TFT with Pluggable I/O Modules

FlexiPanels® - HMI OR HMI with Pluggable I/O

Key Features

- » 16 x 2 Text to 12.1" Graphical Touchscreen Monochrome / TFT Color Display
- » Models available as only HMI **or** HMI with Pluggable Digital and Universal 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 +10 VDC. 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 true 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 Class 1 Div 2 approved. RoHS compliant
- » Multilanguage (Unicode) support with true type Windows® fonts for graphical Models
- » Common Programming software for the entire FlexiPanels® family..... FREE!!

*Not supported in FP4020, FP4030 models

FP5121
12.1" Color TFT

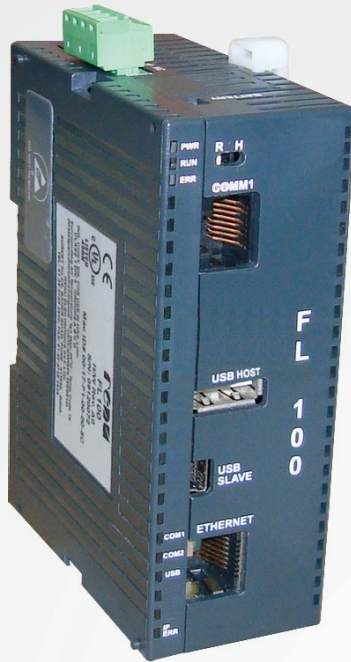
FP4035
3.5" Color TFT

FP4020
16 x 2 Multicolor LCD

FP4030
3.1" Multicolor LCD

FP4057
5.7" Color TFT

FP4030MT
3" Mono Touch Screen with Multicolor Backlight



» FlexiLogics® - FL100 Series PLCs

Key Features

- » DIN rail mounted compact PLC with a high speed RISC processor
- » 21 ns per contact processing speed
- » 22 Mb for logic program
- » Up to 20 Mb of internal storage for data logging
- » 2 serial ports, 1 USB host port, 1 USB device port, Ethernet port
- » Built-in configurable web server
- » Up to 16 expansion modules
- » CE, UL Class 1 Div 2 listed
- » Program using IEC 61131-3
- » FREE FlexiSoft programming software



» FlexiLogics® - FL5 Series PLCs

Key Features

- » DIN rail mounted slim PLC
- » Fixed I/O versions from 6 digital inputs and 4 digital outputs to 8 digital inputs, 8 digital outputs, 2 analog inputs and 1 analog output
- » 16 digital input and 16 digital output version may have up to 16 expansion modules
- » 32 bit RISC processor
- » Built-in real time clock
- » High Speed (200 KHz) Counters configurable for single channel or quadrature
- » High Speed PWM outputs (100 KHz)
- » Up to 2 Serial Ports. Support for various PLC protocols
- » USB Device Port for programming and monitoring
- » CE, UL Class 1 Div 2 listed
- » Simple ladder programming or IEC 61131-3
- » FREE FlexiSoft programming software



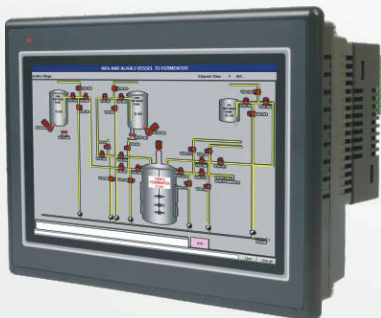
PC5043TN-E



4.3" TFT Color LCD with Pluggable I/O Modules



PC5070TN
7" TFT Color LCD



PC5070TN-E

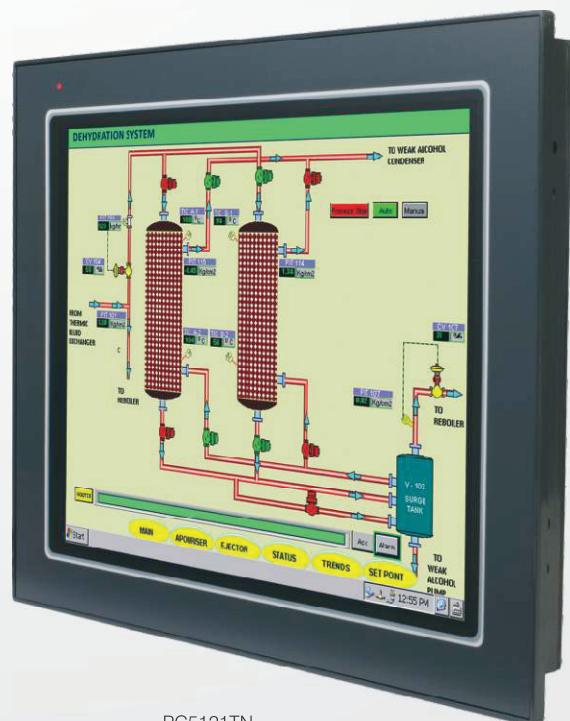


7" TFT Color LCD with Pluggable I/O Modules

WinCE based FlexiPanels® - HMI OR HMI with Pluggable I/O

Key Features

- ▶ 4.3" WQVGA (480x272 pixels), 7" WVGA (800x480 pixels), 12.1" SVGA (800x600 pixels) TFT Color Touch screen Graphical Display
- ▶ Support for Windows CE runtime software
- ▶ Support for 65K color, Built-in RTC
- ▶ Dual Port communication supported
- ▶ Serial Communication Ports:
Serial ports to connect PLC at RS232 / 485 levels
- ▶ USB Ports:
One USB device port
One USB host port: Can be used for Extended Memory / USB Keyboard / USB Mouse
- ▶ Ethernet Port:
One Ethernet port (10/100 Mbps)
- ▶ Memory:
Up-to 128 MB RAM
Up-to 128 MB flash memory
- ▶ Integrated / Pluggable Digital and Analog Inputs and Outputs
- ▶ Digital Outputs - OC / Relays
- ▶ Analog Inputs for RTD, mV, mA, Thermocouple, 0 to 5 VDC, 0 to 10 VDC, -10 to +10VDC
- ▶ Analog Outputs are 4-20 mA / 0-10 VDC
- ▶ Support for Quadrature inputs and PWM output
- ▶ IP66 design. CE / UL approval. RoHS compliant



PC5121TN
12.1" TFT Color LCD



GATEWAY



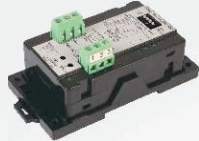
CAN to Serial



Serial to Serial



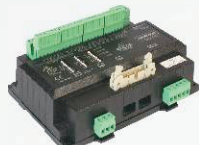
Profibus to Serial



LonWorks to Serial



HART to Serial



HART to Ethernet



Ethernet to Serial



GSM to Serial

» Gateway (Protocol Converters)

Programmable Industrial Protocol Converters

Make your Serial Device such as PLC / Drives / DCS / PID Controllers / Energy Meters etc. compatible with:

- » Other Serial Devices
- » LonWorks Network
- » CAN Open / CAN Network
- » Profibus Network
- » Ethernet Network (Modbus TCP/IP)
- » HART Devices
- » GSM Network
- » CE and UL certified
- » Windows® based Common Programming Software for the entire Gateway family.....FREE!!



FIELD I/O



Analog I/O Modules



Universal Analog I/O Module



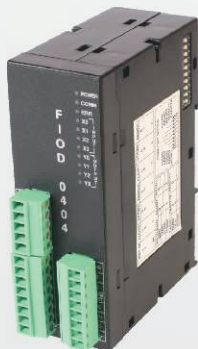
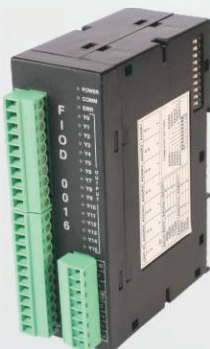
RTD Input Module

» Field I/O Modules - Analog

Key Features

- » Low cost compact Analog I/O modules with DIN rail mounting
- » Programmable inputs allow same modules to accept RTD, Thermocouple, mA, mV and Volts
- » 12 / 16 bits analog inputs with analog outputs
- » High Speed Modbus RTU (Slave) communication
- » User definable Address, Baud rate and Parity
- » 2 wire RS485 port provided on pluggable terminal block
- » Can be multi dropped as Modbus Slave on RS485 Network
- » Indication for Diagnostics, Power and Communication
- » CE marked with optional UL certification

Digital I/O Modules



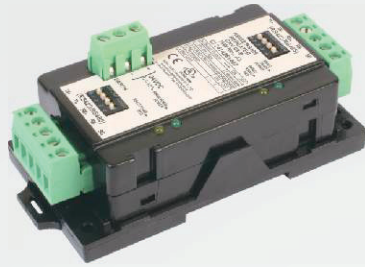
» Field I/O Modules - Digital

Key Features

- » Low cost compact Digital I/O modules with DIN rail mounting
- » 2 wire RS485 port provided on pluggable terminal block
- » User definable Address, Baud rate and Parity through DIP Switch
- » High Speed Modbus RTU (Slave) communication
- » LED indication for each Input, Output, Communication and Power ON
- » No configuration software required
- » Relay and Transistor outputs available
- » CE marked with optional UL certification



SIGNAL REPEATER



RS422 / 485 to RS422 / 485 Repeater

» Universal RS422 / RS485 Repeater

Key Features

- » DIN rail or panel mounted compact Repeater
- » External powered design
- » Isolation of power and communication ports
- » Automatic detection of communication baud rate
- » Automatic control of transceiver direction
- » CE / UL certification
- » Easy to use plug and play device (no configuration software required)



SIGNAL CONVERTER



RS232 / CMOS to RS422 / 485 Converter

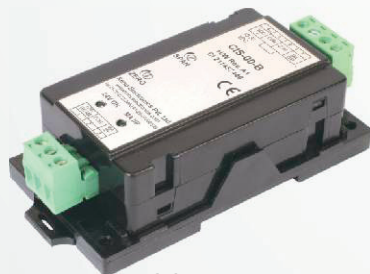
» RS232 / CMOS to RS422 / RS485 Signal Converter

Key Features

- » DIN rail or panel mounted compact Converter
- » Port powered or external powered design
- » Isolation of power and communication ports
- » Automatic detection of communication baud rate
- » Automatic control of transceiver direction
- » CE / UL certification
- » Easy to use plug and play device (no configuration software required)



CURRENT ISOLATOR



CIS-00-B

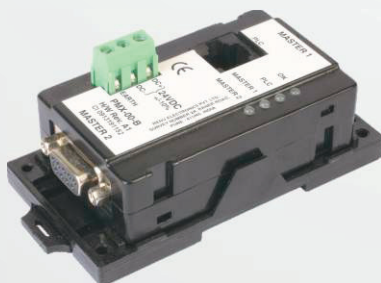
» Current Isolator

Key Features

- » DIN rail or Panel Mounted compact Current Isolator
- » Isolated Input, Output and Power Supply (3 Port Isolation)
- » 4-20 mA Input
- » 4-20 mA isolated output
- » Output zero and span set by use of potentiometer
- » Additional isolated 24 V DC power source for loop powering



PORT MULTIPLEXER



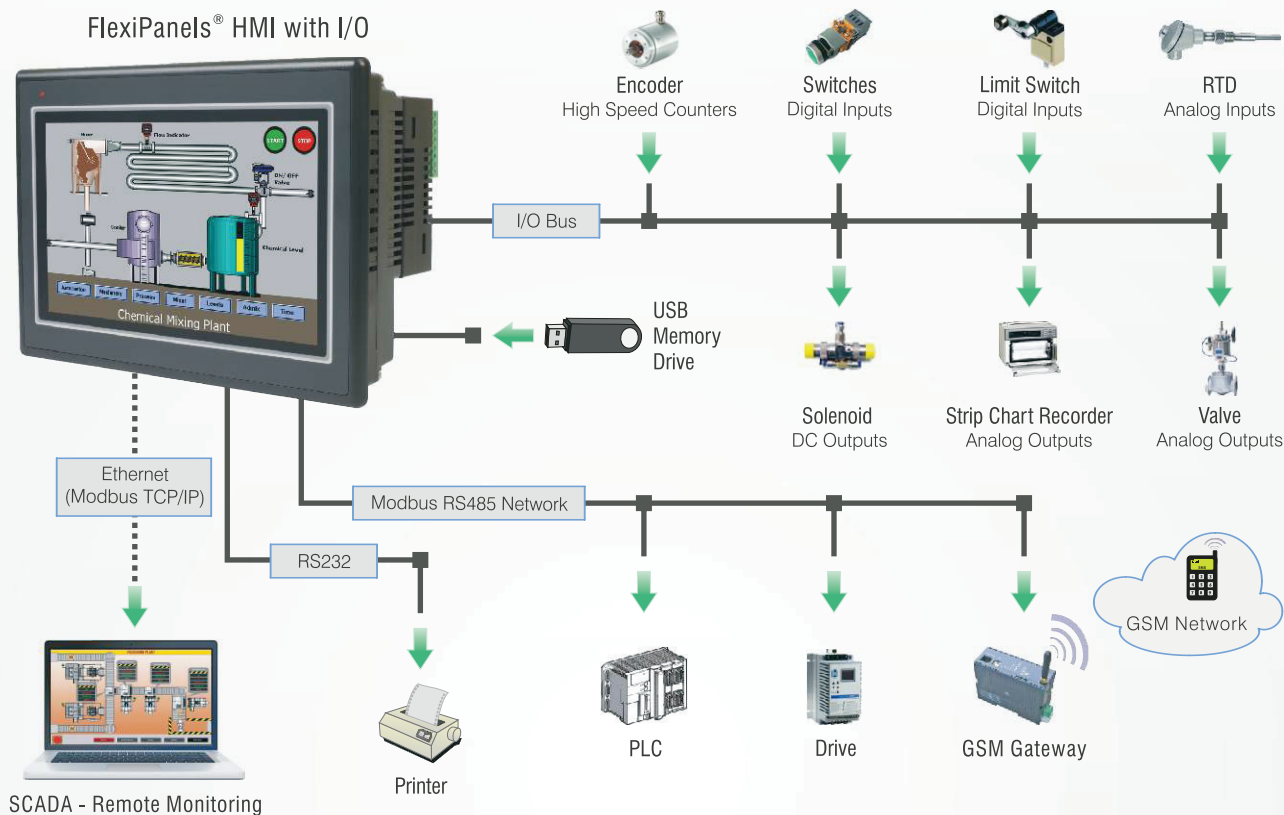
PMX-00-B

» PORT MULTIPLEXER

- » DIN rail or Panel Mounted compact Port Multiplexer
- » Connect Two Master devices to any serial slave device (e.g. PLC, Drive) on same protocol
- » Hardware with three communication ports
- » RS232 support for Master Ports. PLC port with RS232 / RS422 / 2 or 4 wire RS485 / CMOS
- » Ideal for PLCs / Drives which have only one communication port
- » Same model can be configured for different supported protocols
- » CE marked with optional UL certification
- » Free Programming software for Port Multiplexer !!

Application Example

► HMI with I/O for Control Application



Protocols Supported include

- | | | | |
|---------------------|---------------------------------------|-----------------------------------|-----------------------------------|
| ► ABB PLCs | ► Idec PLCs | ► Modbus RTU (Unit as Slave) | ► Toshiba Inverters PLCs |
| ► Allen Bradley DF1 | ► LG Master K Series PLC | ► Modbus / TCP Master (Client) | ► Toshiba T Series |
| ► Aromat FP Series | ► LG Master K 300S | ► Modbus / TCP Server (Slave) | ► TriPLC |
| ► Baldor | ► Logix 5000 PLCs | ► Omron Host Link | ► Twido PLCs |
| ► Danfoss Drive | ► Mitsubishi FX | ► Omron Inverter Memobus | ► Unitelway PLCs |
| ► Delta PLCs | ► Mitsubishi Q Series PLCs (Serial) | ► Serial Printer | ► Universal Serial Driver (ASCII) |
| ► Fatek PLCs | ► Mitsubishi Q Series PLCs (Ethernet) | ► Siemens S7-300 Series PLCs | |
| ► GE SNP | ► Modbus ASCII (Unit as Master) | ► Siemens Step-7 Micro | |
| ► GE SNP-X | ► Modbus RTU (Unit as Master) | ► Toshiba (Link Port) Series PLCs | |

New PLC drivers are constantly added. Please contact factory for more information. We welcome an opportunity to develop new, custom drivers and customized units.

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