![RENU ELECTRONICS PVT. LTD.]

FACTORY AUTOMATION

FlexiPanels - HMI

FlexiPanels - HMI with I/O

FlexiLogics - Modular PLC

Gateway - Protocol Converters

Field I/O - Analog and Digital

Automation Simplified

About Us

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

Salient 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" WVGA Color TFT

FP3035
3.5" HVGA Color TFT

FP3043
4.3" WQVGA Color TFT

FP3070
7" WVGA 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

Salient 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

FP4057
5.7" Color TFT

FP4020
16 x 2 Multicolor LCD

FP4030
3.1" Multicolor LCD

FP4030MT
3" Mono Touch Screen with Multicolor Backlight

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

Salient 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
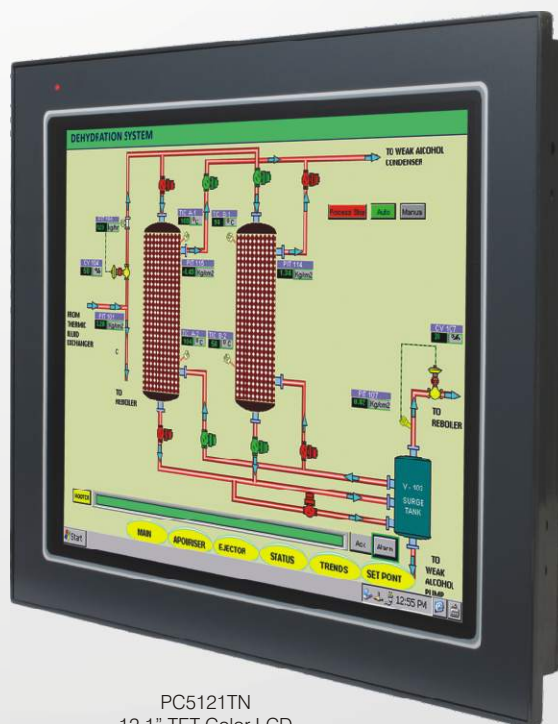
PC5121TN
12.1" TFT Color LCD

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

Salient 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

Salient 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
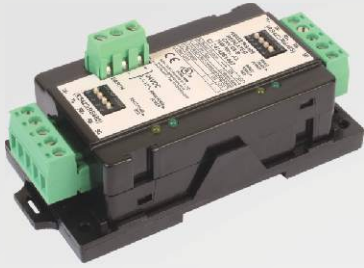
RS422 / 485 to RS422 / 485 Repeater

Universal RS422 / RS485 Repeater

Salient 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 transreceiver 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

Salient 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 transreceiver direction
▶ CE / UL certification
▶ Easy to use plug and play device (no configuration software required)

CURRENT ISOLATOR
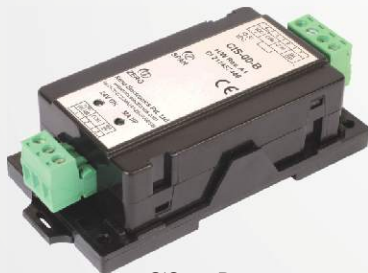
CIS-00-B

Current Isolator

Salient 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
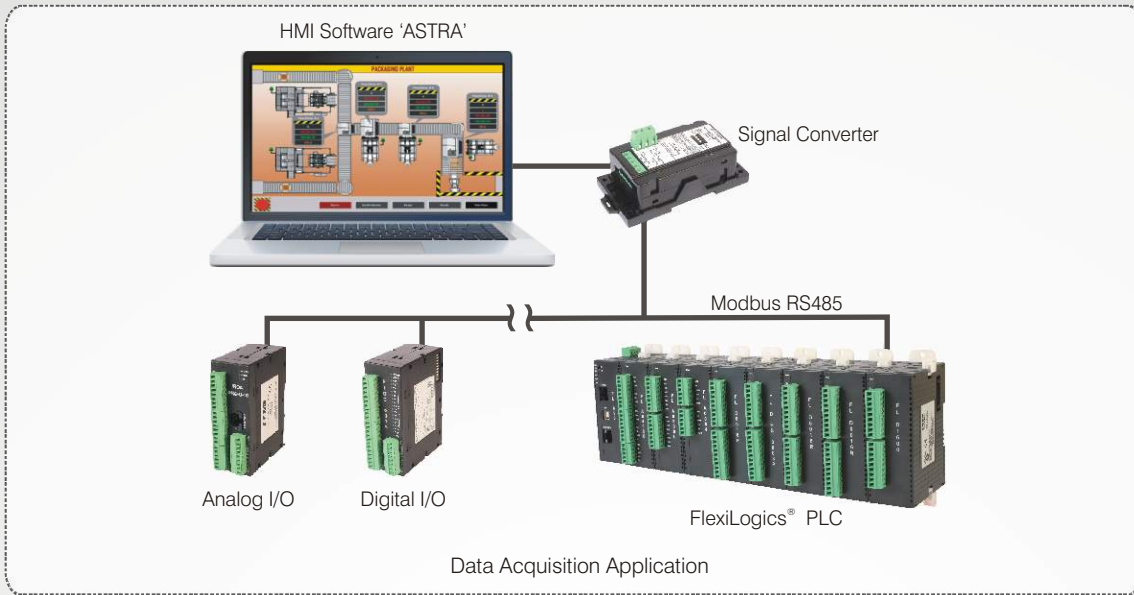
PORT MULTIPLEXER

PMX-00-B

Port Multiplexer

Device to connect Two Masters to One or more than One Slaves :

▶ 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
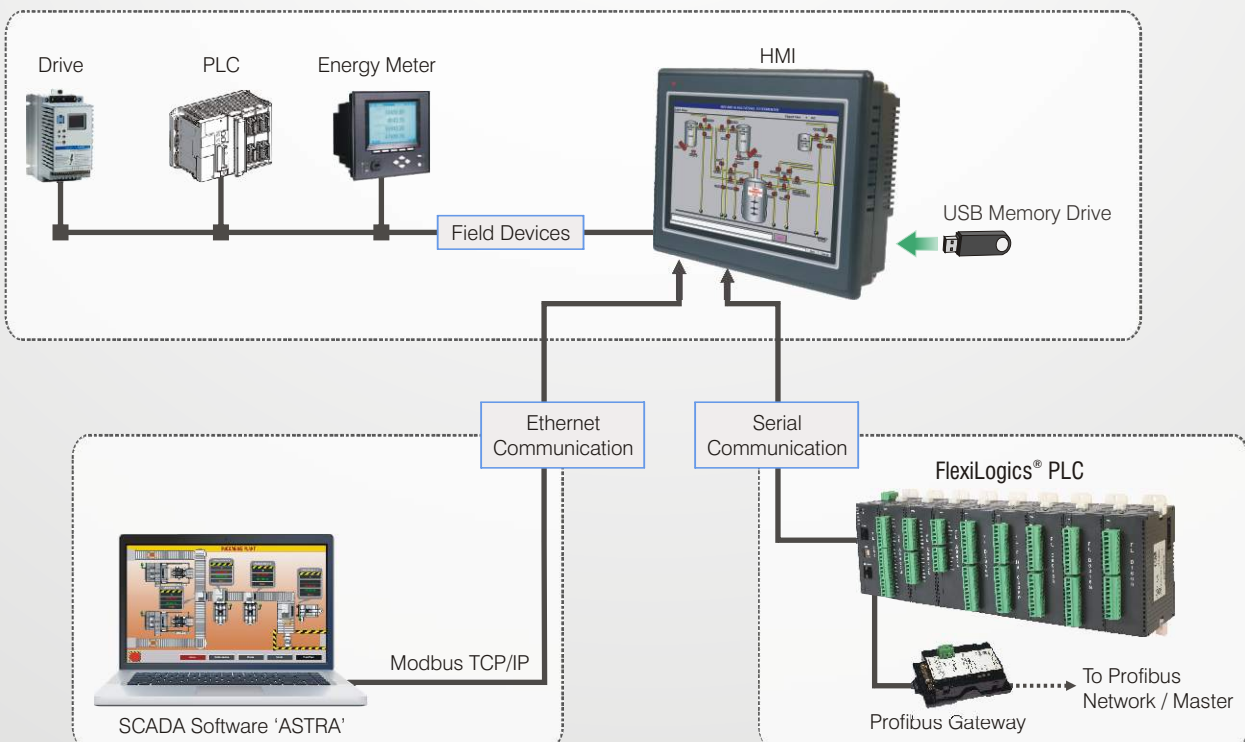▶ Free Programming software for Port Multiplexer !!

ASTRA

HMI Software 'ASTRA'

Signal Converter

Modbus RS485

Analog I/O   Digital I/O

FlexiLogics® PLC

Data Acquisition Application

▶ HMI / SCADA Software (ASTRA)

Salient Features :

▶ Powerful SCRIPT
▶ Recipe Management, 256 Levels of Security
▶ Alarms and Reports Management
▶ Extensive Data and Event Logging
▶ Real Time and Historical Trending
▶ Wizards for Screen Development

▶ Extensive Tags and Database Management
▶ HTTP Web Server, Excel Report Generator
▶ Script Based Report, Advanced Component Library
▶ Open Data Based Connectivity (ODBC)
▶ OLE for Process Control (OPC Client)
▶ Software and Hardware Lock Support

APPLICATION EXAMPLE

▶ PLC Based Control Application

Drive   PLC   Energy Meter   HMI

Field Devices   USB Memory Drive

Ethernet Communication   Serial Communication   FlexiLogics® PLC

Modbus TCP/IP

SCADA Software 'ASTRA'   Profibus Gateway   To Profibus Network / Master

Application Example

HMI with I/O for Control Application

FlexiPanels® HMI with I/O

Encoder
High Speed Counters

Switches
Digital Inputs

Limit Switch
Digital Inputs

RTD
Analog Inputs

I/O Bus

USB Memory Drive

Solenoid
DC Outputs

Strip Chart Recorder
Analog Outputs

Valve
Analog Outputs

Ethernet
(Modbus TCP/IP)

Modbus RS485 Network

RS232

GSM Network

SCADA - Remote Monitoring

Printer

PLC

Drive

GSM Gateway
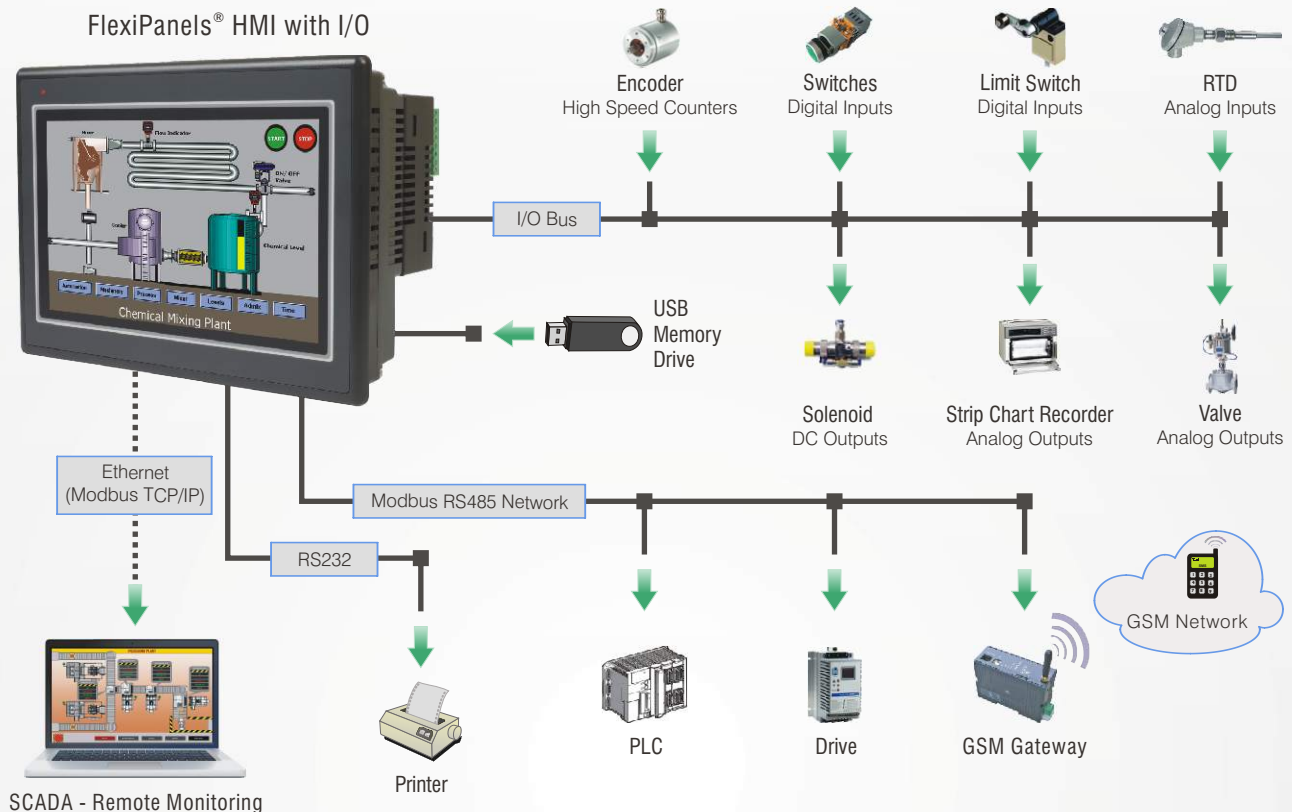
Protocols Supported include

- ABB PLCs
- Allen Bradley DF1
- Aromat FP Series
- Baldor
- Danfoss Drive
- Delta PLCs
- Fatek PLCs
- GE SNP
- GE SNP-X

- Idec PLCs
- LG Master K Series PLC
- LG Master K 300S
- Logix 5000 PLCs
- Mitsubishi FX
- Mitsubishi Q Series PLCs (Serial)
- Mitsubishi Q Series PLCs (Ethernet)
- Modbus ASCII (Unit as Master)
- Modbus RTU (Unit as Master)

- Modbus RTU (Unit as Slave)
- Modbus / TCP Master (Client)
- Modbus / TCP Server (Slave)
- Omron Host Link
- Omron Inverter Memobus
- Serial Printer
- Siemens S7-300 Series PLCs
- Siemens Step-7 Micro
- Toshiba (Link Port) Series PLCs

- Toshiba Inverters PLCs
- Toshiba T Series
- TriPLC
- Twido PLCs
- Unitelway PLCs
- Universal Serial Driver (ASCII)

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

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