



- 16 X 2 back lit LCD
- 8 function keys with macro functions.
- Floating point, Alarms, Dual port support, Recipes
- Serial port for printing screens / alarms
- Optional RTC

The Prizm12 is a member of the Keypad based Operator Interface family from Renu Electronics. It uses a 16 X 2 back lit LCD display. It is designed for applications for message display and for data entry into PLC registers.

#### Function Keys

The Prizm12 has 8 powerful user definable function keys. Keys can be assigned Tasks for three instances: when key is pressed once, while key is pressed and when key is released. Multiple tasks can be assigned to a key. Tasks can be assigned to a combination of two keys. Also different screens can have different key definitions. In addition to above-mentioned tasks, Key's specific tasks can be defined for keys. These include tasks for data entry, alarm management, coil operations (such as coil on, off, toggle, hold on or hold off), register operations (such as write constant to registers, copy tags etc.), screen operations (such as go to a specific screen, go to the next defined screen, go to previous screen etc.). These definitions allow complete flexibility in cursor control and key operations when changing data.

Access to function keys can be protected using a password.

Prizm12 has eight user definable LEDs for the purpose of annunciation. The LEDs are mapped to a user definable register in the PLC.

#### Changing Data

Data entry objects can be defined in the Prizm where data is to be changed. Since every user wants different ways to edit the data, the unit provides full flexibility in cursor control and key operations during data entry.

A bit / coil status can also be edited in an interactive manner. The key toggles the bit status and a key can be defined as ENT to accept the selection. Text for the object (for example, RUN when bit is ON and STOP when bit is off) changes on the display to indicate the selected bit status making it very user friendly.

#### Screens

Up to 65534 screens can be defined in Prizm12. The unit has 512 KB flash memory. Screen Tasks can be assigned before showing a screen, while showing a screen and after hiding a screen. Various types of objects can be defined on the screen. Objects include plain text objects, Data display (coil status, register value, register dependent text), Data entry objects, Alarm objects. Two screens can be associated to avoid duplication of screens and objects. Data entry objects can have limits and math associated. Various types of data formats are available which help user to edit data easily. Float data entry is also possible. Data can also be displayed in a bar graph format.

#### Alarms

User can define 256 real-time alarms in Prizm12. Alarms can either be consecutive or discrete. User-friendly alarm object can be defined on the display. Alarm logging along with on / off time is also available. User can store up to 30 historical alarms. Keys can be assigned to acknowledge alarm, view next / previous alarm etc.

#### Setup

Prizm12 is setup on an IBM PC using the Prizm software which is provided free of cost with the unit.

#### Configuration Software

Prizm12 unit has to be configured before its use in any system.

Complete configuration consists of defining:

1. Prizm Settings
2. PLC node
3. Tag Database
4. Global Keys
5. Alarms
6. Global and Power-on Task list
7. Screens and Screens Task-List, Screen keys, if required.

The complete configuration is stored as an Application. This application is downloaded in Prizm12.

Prizm is a compact, Windows® based software to configure the Prizm Series Interfaces. Prizm's tools and easy approach can help you create your applications quickly and easily. By using some of Prizm's new features, you can be more effective in what you need. Whether you need a small application to monitor data or a bigger application for both monitoring and changing data in your PLC, Prizm has it all.

#### Other Items required for Prizm configuration

To get started with Prizm you need:

1. Prizm unit
2. Prizm Setup Software
3. IBM Cable (Part codes: IBM 0909-1-00 or IBM 0925-1-00)

#### System requirements for Prizm are:

Windows Version	: Microsoft Windows® NT / 2000 / XP
Processor	: PENTIUM or higher
Mouse	: Required
RAM	: 64 MB or more
Display resolution	: 800 x 600 (VGA) or better
Display colors	: 256 colors or more

## Specifications :

Power	: + 24V DC $\pm$ 10%, 3W maximum / 5 V DC from programming port of PLC	Immunity to ESD	: as per IEC61000-4-2
Display	: 2 lines of 16 characters backlit LCD	Immunity to Fast Transients	: as per IEC61000-4-4
Bezel	: IP65 rated keypad	Immunity to Radiated electromagnetic field	: as per IEC61000-4-3
Bezel Size	: 108W X 70H X 36D (mm)	Immunity to Conducted disturbances	: as per IEC61000-4-6
Panel cutout	: 99 X 63 (mm)	Surge	: as per IEC61000-4-5
Communication Ports	: Two serial ports for connecting to a PLC, for programming of Prizm, connecting to a serial printer, a third party device and another PLC or Drive.	Radiated emission	: as per EN61000-6-4
Temperature	: Operating : 0° to 50° C* Storage : -25° to 80° C	* Extended temperature range available. Contact factory for details.	
Humidity	: 10% to 90% (Non condensing)		
Communication	: Using programming port of PLC		

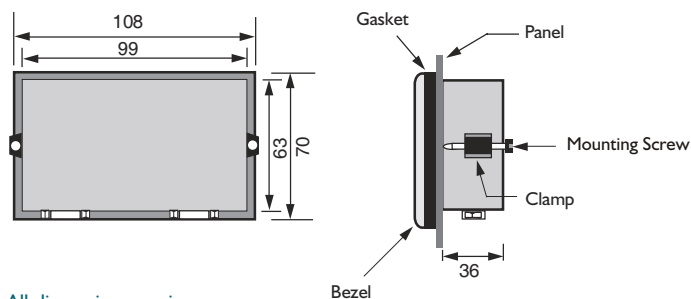
## Protocols supported for :

- ABB AC 31 Series
- ABB AC 70 Series
- AB Micrologix
- AB SLC 500 (DF1)
- AB SLC 500 (DH485)
- Aromat FP0 Series
- Aromat FP1
- Aromat FP3
- Aromat FP Sigma
- CEGELEC ALSPA
- Crouzet Millenium
- Delta DVP Series
- FATEK PLC
- Fuji Flex
- FATEK PLC
- Fuji Flex
- GE 90-30 / Versamax (SNP)
- GE VersaMax, RJ45
- GE VersaMax, DB9
- IDEC Micro3
- IDEC MicroSmart
- Jetter nano – B
- Keyence KV Series
- Koyo DL105 / 205 / DL05
- LG-Master K Series
- LG Master K10S & 10SI PLC
- LG Master 200 S Series
- Messung XMP8 PLC Series
- Messung Nexgen 4000
- Messung Nexgen 5000
- Mitsubishi FX(8 pin con'r)
- Mitsubishi FX(25 pin con'r)
- Modbus Slave
- Modicon Quantum
- Modicon Micro
- Omron (Host Link) - 9 pin
- Omron (Host Link) - 25 pin
- Samsung SPC 10
- Samsung N70 Plus
- Siemens S7-200 / 300
- Spencer PLC
- Square D Sy/max
- Taian TP02 Series
- Telemecanique TSX-17 Series
- Telemecanique TSX-47 Series
- Telemecanique TSX-67 Series
- Toshiba - Programming Port
- Toshiba T1
- Toshiba T2
- Toshiba T Series (Link port)
- Toshiba T2 (Link port)
- Twido
- USS Protocol
- Yaskawa
- Yokogawa PLC

Note :- Refer Prizm Keypad based products family brochure for specific cable part numbers

**New PLC drivers are constantly added. Please contact factory for more information.**

## Dimensions :



All dimensions are in mm.

## Models :

Model	RTC	Power	Part Number
Prizm12-5	Yes	+ 5 V DC*	PZM-12-5-B
Prizm12-24	Yes	+ 24 V DC	PZM-12-24-B

\* PLC Powered



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