

Industrial Modbus LED Display

iKAN-116



Features ▶▶▶▶

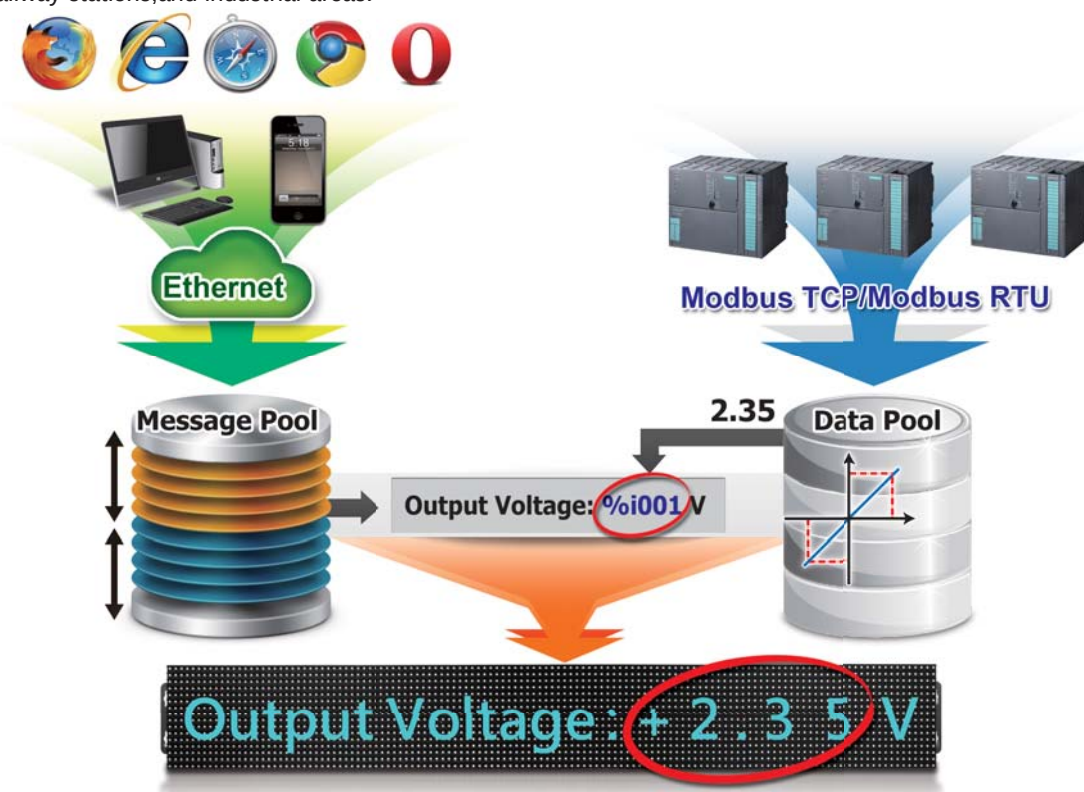
- Supports Modbus TCP Slave and Modbus RTU Slave protocols
- Can be remotely controlled using a smart phone or other mobile device
- 7 colors, including red, blue, yellow, green, light blue, purple and white
- Able to store up to 64 common messages and 10 instant messages
- Web-based User Interface
- Able to integrate both text and variables in a single message
- Built-in RTC (Real Time Clock)
- Supports multiple languages with a text height of 16 cm

Introduction ▶▶▶

The iKAN-116 is an industrial LED display that delivers industrial-grade anti-noise capability as well as reliability and stability. It is suitable for indoor areas and provides a singleline of 8 Unicode characters for multiple languages, or 16 ASCII characters. Support for the popular Modbus industrial protocol is provided meaning that it can be easily integrated into existing PLC and SCADA.

The iKAN-116 enables data written from a PC or PLCs to be displayed in real-time in a formatted message. Seven colors are available for the text, which can be used to indicate different degrees of importance of the message, as well as significantly increasing the readability of the message in an industrial arena.

Messages can be edited using a standard web browser, such as Google Chrome, Firefox, or IE, etc., on a PC, mobile device, or smartphone without any limitations related to specific control tools or programs. The display of individual messages can also be remotely enabled or disabled as necessary using the same standard web browser. The iKAN-116 provides storage space for up to 64 common messages and 10 instant messages, each containing a maximum of 40 Unicode characters or 100 ASCII characters. In addition, the ability to configure user-defined variables is provided, including 40 coils, 64 floats and 64 integers, to enable data from a PC, PLC or other controller to be automatically integrated into a message and then displayed. With an open user interface and the ability to display real-time data, the iKAN-116 can be installed in a variety of indoor spaces, including shopping malls, railway stations, and industrial areas.



Message Pool and Data Pool

The internal memory of the iKAN-116 consists of two elements, known as the Message Pool and the Data Pool. The Message Pool includes storage space for up to 64 common messages and 10 instant messages. The Data Pool includes provision for integer-, float-, and coil-type variables, as well as system variables, which allows data obtained from remote modules to be written to the display via a PLC host or SCADA software. A message can be preconfigured by inserting the address ID of the variable, and then the variable value will be shown on the display in real time.

Web-based User Interface

A message can be preconfigured, or the variables can be edited, via a standard web browser, meaning that no utility software needs to be installed, and no specific programming knowledge or skills are required.

Message Editing

A maximum of 64 common messages and 10 instant messages can be preconfigured from the first moment that the iKAN-116 is switched on. When the display is in operation, the focus needs only be on message management rather than the need to frequently update the messages.

Message Priority

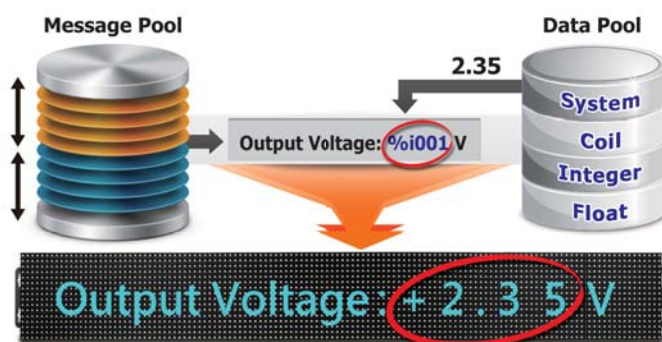
Instant messages have a higher priority than common messages. Once an instant message is enabled, the common message currently being displayed will be suspended until the instant message is disabled. This feature allows the most important information to be displayed in an emergency situation.

Smart Phone Application

The iKAN-116 allows messages to be managed via a regular smartphone with no specific connection device required, meaning that emergency information can be quickly sent to the display using the smartphone.

Built-in RTC

The iKAN-116 includes a built-in real-time clock (RTC), and the generated value can be used as system variables, which can be integrated into a message. The updated value will then be automatically displayed without requiring any additional programming.



Support for the Modbus TCP/Modbus RTU Protocol

The majority of devices used in the industrial field support the Modbus protocol. The iKAN-116 also supports the Modbus TCP/Modbus RTU protocol, which reduces the learning curve required when first using the iKAN-116, and ensures easy integration of the display into either a new or an existing system.



Integer-type variables enable data mapping

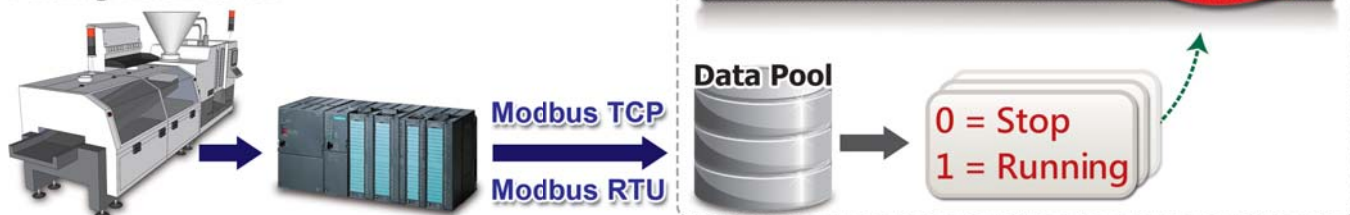
The iKAN-116 is able to perform data mapping to translate a computer integer value to a readable physical value, such as voltage, temperature, or relative humidity, etc. In the industrial field, this is a commonly performed task between the host computer and the data-acquisition devices via the Modbus protocol, enabling a reduction in the resources and programming required for the host computer.



Boolean (Coil) variable to text mapping

The iKAN-116 can also be used to translate the status of a switch or relay (which is usually a Boolean value where 0 or 1 represents ON or OFF) into readable text.

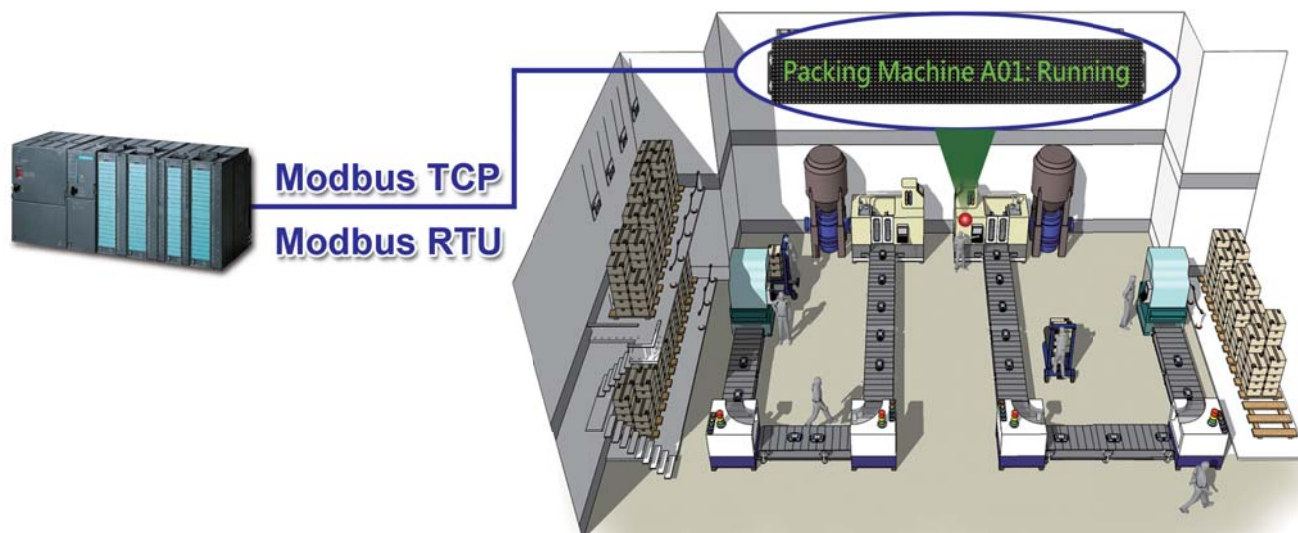
Packing Machine A01



Applications

PLC HMI

The iKAN-116 can be employed as a large HMI with a memory storage of up to 64 common messages and 10 instant messages, each of which can be used to display information generated by a PLC. A range of seven colors is available for the text, including red, blue, yellow, green, light blue, purple and white, which can be used to indicate warnings or alarms, as well as increasing the readability of a message.



Indoor Air Quality Display

The iKAN-116 can be used to read indoor air quality monitoring data from an external DL-302 module, including the carbon dioxide level, temperature and humidity, and then display the information in real-time, making it suitable for commercial and public buildings, such as schools and museums, as well as for retail, leisure and healthcare facilities where personnel are required to stand for long periods of time, and where the indoor air quality is required to be monitored and displayed at the entrance or lobby of the building.



Specifications ▶▶▶

Model	iKAN-116
Display	
Color	Red, Blue, Yellow, Green, Light Blue, Purple or White
Character Sets	16-bit Unicode or 7-bit ASCII
Display Size	One line of 8 Unicode characters or 16 ASCII characters
Message Pool	64 common messages and 10 instant messages Up to 40 Unicode characters or 100 ASCII characters each
Data Pool	40 Coils, 64 Float values, and 64 Integer values
RTC (Real-time Clock)	Date and time, 24 hour format including second, minute, hour, date, day of the week, month, year
Ethernet	
Port	1 x RJ-45, 10/100 Base-TX
Protocol	Modbus TCP Slave
Max. Connection	8
Configuration	Web-based User Interface
COM Port	
Port	1, RS-232 or RS-485
Baudrate (bps)	1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200
Data Format	N81, E81, O81
Protocol	Modbus RTU Slave
Power	
Input Range	110 ~ 220 VAC
Mechanical	
Dimensions (W x H x D)	1346 mm x 160 mm x 49 mm
Installation	Wall mounting
Environment	
Operating Temperature	0 ~ +60°C
Storage Temperature	-10 ~ +75°C
Humidity	10 ~ 90% RH, Non-condensing