

AK-28

Embedded Industrial Controller

RUHW0006-100



OVERVIEW

The AK-28 is RUSS' latest low-cost, midrange embedded industrial controller used for automation, data acquisition, and data logging applications. AK-28's versatile features lead the market trend toward integration—integration of operator interfaces, real-time control, data acquisition, flexible I/O, and network communications—in a compact package.

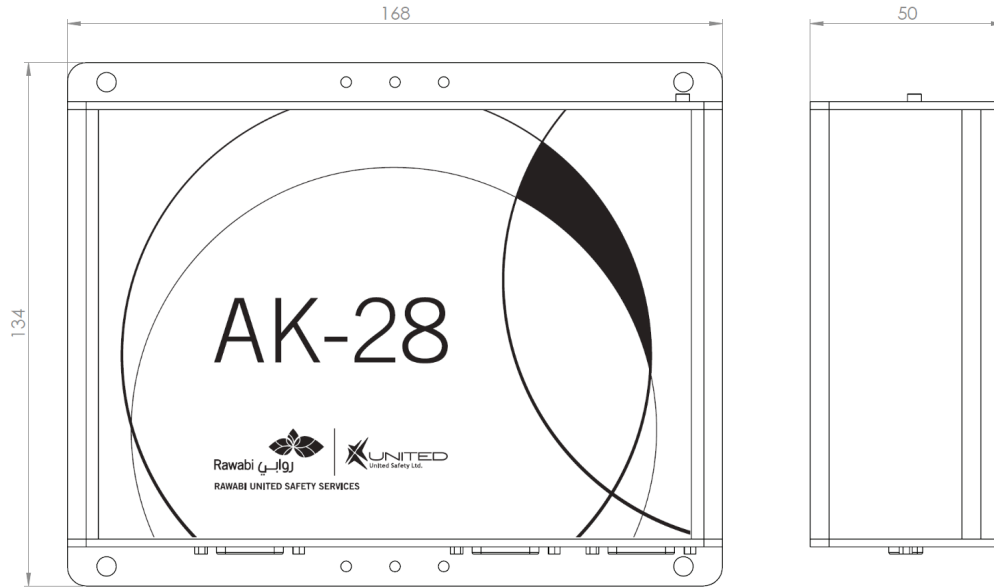
The AK-28 is compatible with a multitude of sensor types such as 4-20 mA and digital sensors. The I/O ports allow for serial communications with serial sensors and devices. It can be used in a broad range of measurement and control functions.

Another, advanced feature is the AK-28's capability to function as an embedded webserver, enabling communications with other computers or peripherals on the network. The ethernet port implements a dynamic webserver that accepts connections from a web browser, serving out static or dynamic web pages.

FEATURES

- Compact package with DIN rail mounting
- Ideal for use in plant process automation, O&G gas detection safety applications
- Ideal for home automation and home safety monitoring applications
- Flexible communication options make it ideal for remote locations
- Compatible with channel expansion peripheral allowing you to expand your system
- Communications via various options: TCP/IP, email, SMS, webserver, MODBUS TCP/ASCII/RTU, PolarBus™
- On-site end-user configurable, end-user programmable
- SCADA interface
- Collects, stores, and displays data and controls peripherals
- ESD Protected up to 15 kV (HBM), Surge protected communication ports

MECHANICAL DIMENSIONS



SPECIFICATIONS

PROCESSOR	Number of Cores	8
	Clock Speed	80 MHz
	Storage	2 x 8 MB flash, Up to 4 GB SD Card
POWER	Input Voltage	10-15 V
	Typical Power Consumption	3.6 W
	Peak Power Consumption	20.4 W
COMMUNICATION PORTS	RS-232	2 (DB-9), 250 kbps maximum bitrate
	RS-485	1 (2-wire), 250 kbps maximum bitrate
	VGA	1 (DB-15)
	Ethernet	1 (RJ-45), 900 kbps maximum bitrate
	USB 2.0	1 (Type B)
ANALOG INPUTS	Number of Voltage Inputs	4 Differential Pairs
	Input Voltage Range	-30 to 30 V
	Number of Current Inputs	4
	Maximum Current	20 mA
	Absolute Accuracy	± 10 mV , ± 0.01 mA
DIGITAL GPIO	Number of I/O	8
	Voltage Range	0-3.3 V
	Maximum Current per Pin	20 mA
DISPLAY	Resolution	640 x 480
	Colors	8-bit 256 colors
PHYSICAL CHARACTERISTICS	Dimensions	134 x 168 x 50 mm
	Weight	~ 450 g
ENVIRONMENTAL	Operating Temperature	-25 to 70 °C
	Relative Humidity	Up to 80 % (non-condensing)