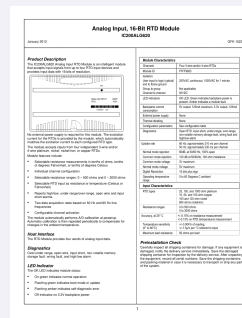


FIELD INSTALLATION QUICK GUIDE

Installation Instructions

IC200ALG620

four-channel RTD input module



PRODUCT	IC200ALG620
FAMILY	VersaMax analog I/O
FUNCTION	four-channel RTD input module
STATUS	Verify exact installed equipment

Prepared by Amikon Limited from GE VersaMax documentation. This guide supplements the complete manufacturer manual and site procedure.

01

CONFIRM THE ORDERED CONFIGURATION

RTD Channels	4
Supported Sensors	Pt100, Pt1000, Ni120 and Cu10
Connection	2-, 3- or 4-wire
Resolution	16 bits
Update Rate	160 ms per channel
Open-wire Detection	Supported

02

PREPARATION AND CONNECTION

- Confirm the complete IC200ALG620 article number and installed revision.
- Isolate applicable electrical and process energy using the approved site procedure.
- Record every connector, cable, terminal, shield and protective-earth connection before removal.
- Install without forcing keyed parts, then secure terminals, latches, fasteners and cable supports.

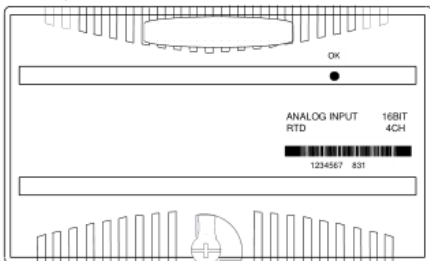
Analog Input, 16-Bit RTD Module

IC200ALG620

January 2012
GFK-1523L

Product Description

The IC200ALG620 Analog Input RTD Module is an intelligent module that accepts input signals from up to four RTD input devices and provides input data with 16 bits of resolution.



No external power supply is required for this module. The excitation current for the RTDs is provided by the module, which automatically matches the excitation current to each configured RTD type.

The module accepts inputs from four independent 3-wire and/or 4-wire platinum, nickel, nickel/iron, or copper RTDs.

Module features include:

- Selectable resistance measurements in tenths of ohms, tenths of degrees Fahrenheit, or tenths of degrees Celsius
- Individual channel configuration
- Selectable resistance ranges: 0 – 500 ohms and 0 – 3000 ohms
- Selectable RTD input as resistance or temperature (Celsius or Fahrenheit)
- Reports high/low, under-range/over-range, open wire and input short alarms.
- Two data acquisition rates based on 50 Hz and 60 Hz line frequencies
- Configurable channel activation

The module automatically performs A/D calibration at powerup. Automatic calibration is then repeated periodically to compensate for changes in the ambient temperature.

Host Interface

The RTD Module provides four words of analog input data.

Diagnostics

Over/under range, open wire, input short, non-volatile memory storage fault, wiring fault, and high/low alarm.

LED Indicator

The OK LED indicates module status:

- On green indicates normal operation
- Flashing green indicates boot mode or update
- Flashing amber indicates self-diagnostic error
- Off indicates no 3.3V backplane power

Module Characteristics

Channels	Four 3-wire and/or 4-wire RTDs
Module ID	FFFF9803
Isolation:	
User input to logic (optical) and to frame ground	250VAC continuous; 1500VAC for 1 minute
Group to group	Not applicable
Channel to channel	50VDC
LED indicators	OK LED: Green indicates backplane power is present. Amber indicates a module fault.
Backplane current consumption	5V output: 125mA maximum. 3.3V output: 125mA
External power supply	None
Thermal derating	None
Configuration parameters	See configuration table
Diagnostics	Open RTD, input short, under-range, over-range, non-volatile memory storage fault, wiring fault and high/low alarm
Update rate	60 Hz: approximately 210 ms per channel 50 Hz: approximately 230 ms per channel
Normal mode rejection	60dB, at 50/60 Hz, 100% span
Common mode rejection	120 dB at 50/60Hz, 100 ohm imbalance
Common mode voltage	3V maximum
Normal mode voltage	5V maximum
Digital Resolution	15 bits plus sign
Operating temperature range	0 to 60 Degrees C ambient

Input Characteristics:

RTD types	25, 100, and 1000 ohm platinum 10, 50, and 100 ohm copper 100 and 120 ohm nickel 604 ohms nickel/iron
Resistance ranges	0 to 500 ohms 0 to 3000 ohms
Accuracy, at 25° C	+/-0.15% on resistance measurement +/-0.15% on RTD (temperature) measurement
Temperature sensitivity (0° to 60°C)	+/-0.004% of reading, +/-1.5µV per °C referred to input
Maximum lead resistance	50 ohms per lead

Preinstallation Check

Carefully inspect all shipping containers for damage. If any equipment is damaged, notify the delivery service immediately. Save the damaged shipping container for inspection by the delivery service. After unpacking the equipment, record all serial numbers. Save the shipping containers and packing material in case it is necessary to transport or ship any part of the system.

04 COMMISSIONING CHECKS

- 01 Confirm product identity and mechanical seating.
- 02 Verify the documented supply before energising.
- 03 Inspect polarity, shielding and protective-earth connections.
- 04 Restore power in the approved sequence and observe status indications.
- 05 Test each connected input, output or communication path.
- 06 Record diagnostics and functional-test results before return to service.

05 CONTROLLED DOCUMENT

Official source	GE official manufacturer documentation
Product record	IC200ALG620
Manufacturer	GE VersaMax
Warranty	12 months from AMIKON
Support	INFO@AMIKON.CN

AMIKON PRODUCT SUPPORT

+86-18020776786

INFO@AMIKON.CN

AMIKONG.COM