Analog I/O Modules (Input)

GE offers easy-to-use analog modules and HART analog modules for control processes such as flow, temperature and pressure.

	IC694ALG232	IC694ALG233	IC695ALG600
Product Name	**PACSystems RX3i Analog Input, Voltage, High Density (16 Channel) 16 Bit with advanced diagnostics**	**PACSystemsRX3i Analog Input, Current, High Density (16 Channel) 16 Bit with advanced diagnostics**	**PACSystems RX3i Analog Input. Configurable per channel for Current, Voltage, RTD, Thermocouple and Resistive. High Density (8 Channel) Requires High Density Terminal Block (IC694TBB032 or IC694TBS032). Cold Junction Compensation are available for Thermocouple configurations (IC695ACC600 contains 2 CJCs)**
Lifecycle Status	Active	Active	Active
Module Type	Analog Input	Analog Input	Universal Analog Input
Backplane Support	No Backplane Restrictions	No Backplane Restrictions	Universal Backplane Only. Uses PCI Bus.
Number of Slots Module Occupies on Backplane	1	1	1
Range	-10 V to +10 V, 0 to 10 V	0-20 mA, 4-20 mA, 4-20 mA Enhanced	Voltage: +50 mV, +150 mV, 0–5 V, 1–5 V, 0–10 V, +10 V; Current: 0–20 mA, 4–20 mA, +20 mA; Thermocouple Inputs: B, C, E, J, K, N, R, S, T; RTD Inputs: PT 385 / 3916, N 618 / 672, NiFe 518, CU 426: Resistance Inputs: 0 to 250 / 500 / 1000 / 2000 / 3000 / 4000 Ohms
HART Support	N/A	N/A	N/A
Channel-to-Channel Isolation	No	No	Two Groups of Four
Number of Channels	16 Single Ended, 8 Differential	16	8
Update Rate	Single Ended: 5 ms for all channels Differential: 3 ms all channels	6 ms all channels	10ms per Channel; 4 Channels = 40ms (1KHz filter) 127ms per Channel 4 Channels = 508ms (8Hz filter) Channels that are disabled are not scanned, shortening scan time.
Resolution	16 bit; ±10 V, 0.3125 mV, 1 LSB; 0-10 V, 0.3125 mV, 1 LSB	16 bit; 0-20 mA, 0.625 @ 181A/bit; 4-20 mA, 0.5 @ 181A/bit; 4-20 mA Enhanced, 0.5 @181A/bit	11 to 16 bits, depending on configured range and A/D filter frequency
Accuracy	0.25% at 25°C (77°F)	0.25% at 25°C (77°F)	Calibrated Accuracy at 25°C. Better than 0.1% of range (except 10 ohm CU RTD) Accuracy depends on A/D filter, data format, input noise, and ambient temperature.
Input Impedance	500K Ohms (single-ended mode) 1 MegaOhms (differential mode)	250 ohms	Current 249 ohms ±1%
Input Filter Response	23 Hz (single-ended mode) 38 Hz (differential mode)	23 Hz	Configurable: 8Hz, 12Hz, 16Hz, 40Hz, 200Hz, 1000Hz
Notch Filter	N/A	N/A	Yes
Diagnostics	Under Range/Over Range, Positive/Negative Rate of Change, High, High-High, Low, Low-Low	Under Range/Over Range, Open Wire, Positive/Negative Rate of Change, High, High-High, Low, Low-Low	Open Wire, Short Circuit, Positive/Negative Rate of Change, High, High-High, Low, Low-Low
Internal Power Used	112 mA (maximum) @ +5 VDC	120 mA @ +5 VDC	400 mA @ 5 V; 350 mA @ 3.3 V
External Power Requirement	110 mA (maximum) +24 VDC supply connected to TB1 on IC695CHSxxx	65 mA @ 24 VDC	N/A
Connector Type	Terminal Block (20 screws), included with module.	Terminal Block (20 screws), included with module.	IC694TBBx32 or IC694TBSx32. Sold Separately.