General Electric IS200VRTDH1DAC

Complete Product Information

Product role

This Mark VI VME board converts 16 three-wire RTD inputs into controller temperature values. Correct service depends on the selected sensor characteristic and scan mode; a resistance input cannot be assigned one temperature range for every RTD type.

Published product summary

Summary field	Published information
Product type	RTD Input Processor Board
Manufacturer part number	IS200VRTDH1DAC
Shipping	Swift global dispatch
Condition	New, original product
Shipping size (est.)	2cm x 18.5cm x 26.1cm
Country of Origin	USA

Native product information

Product field	Published information
Manufacturer	General Electric
Product Category	Gas Turbine Control
Spare Part Number	IS200VRTDH1DAC
Weight	0.3 kg
Tariff Code	8537101190

Overview

General Electric IS200VRTDH1DAC turns detector resistance into temperature using selected curves and two independently configured input groups, so group settings are central to fault isolation.

Input grouping	Two groups of eight inputs have separate rate and gain settings.
Conversion choices	Resistance and temperature modes require different acceptance records.
Fault isolation	Invalid channels can be removed from scanning without stopping all RTD processing.

Selection and adjacent choices

IS200VRTDH1DAC measures the signals arriving from TRTD or DRTD terminations and applies a selected detector linearization. Platinum, copper and nickel curves differ in nominal resistance and valid temperature span; resistance-mode operation is a separate selection. Preserve the actual detector curve when transferring the project, rather than treating the engineering-unit label as sufficient configuration.

Operating relationship

The first eight and second eight inputs have independent rate and gain choices. The normal 4 Hz mode includes a 50 Hz or 60 Hz rejection selection; the 25 Hz option has architecture restrictions and is not available for TMR. Gain 2.0 is intended for improved accuracy below 190 ohms, while the 10 ohm copper selection has its own gain option.

Integration implications

Hardware electrical checks and configurable temperature limits have different consequences. A hardware-invalid input leaves the scan, whereas a system limit can generate enabled/latching application signals. A diagnosis should retain the resistance, curve, group settings and reset history, so a repaired wire is not confused with an unreset or not-yet-reinstated channel.

Technical parameters

Parameter	Value / condition
RTD input capacity	16
Sensor connection	3 wire
RTD excitation	10 mA DC, pulsed

Technical parameters - continued

Parameter	Value / condition
ADC resolution	14 bit
Normal scan period	250 ms
Fast scan provision	40 ms / 25 Hz; not TMR
Input electrical span	0.3532-4.054 V
Maximum two-way lead resistance	15 ohm
Maximum stated lead distance	300 m
Processor consumption	Less than 12 W
Front indicators	3: RUN, FAIL, STATUS
Configurable input groups	2 x 8 inputs
Normal line-frequency rejection	50 Hz or 60 Hz
Higher-gain resistance condition	Gain 2.0 below 190 ohm

Parameter applicability

VRTD family conversion and diagnostic data apply to the offered H1D AC processor. Curve, group gain, scan architecture and lead conditions govern each installed measurement.

System and supply context

VRTD is the rack-side RTD conversion board; its sixteen channels arrive through the installed Mark VI RTD terminations.

Integration boundary

This processor selects curve, gain and line-frequency rejection. It must be matched to the physical detector, not to a generic temperature-input label.

Applications / Compatibility

Mixed detector characteristics

Use each configured detector curve to convert resistance without assigning the same temperature span to unlike sensors.

Low-resistance accuracy planning

Consider the documented higher-gain setting only within its resistance condition and test it over the intended working region.

Mains-noise rejection

Select the 50 Hz or 60 Hz group filter to suit the installation while preserving the required scan behavior.

Resistance-based acceptance

Use the Ohms input selection or the approved simulator method to separate sensor resistance from temperature-linearization errors.

Precautions scope

Use the configured detector curve and input-group settings when testing temperature conversion and fault recovery.

Installation precautions

Engineering field	Interpretation / condition
Save group settings	Record rate, line-frequency rejection and gain for each eight-input group before removing the VRTD.
Check configured sensor type	Preserve CU10, the selected PT100 variant, N120 or other approved characteristic exactly; nominal resistance alone does not identify every curve.
Avoid an invalid fast-mode change	Confirm the architecture before enabling 25 Hz operation; use the supported normal filtered mode in TMR.
Retain unused channel state	Keep unconnected inputs configured unused so an absent detector does not become a misleading active measurement.
Clear the appropriate latch	Diagnose hardware removal from scan separately from a latching high/low system limit before issuing a reset.
Prove the working region	Use several resistance points within the selected curve and gain region, recording input resistance and converted temperature together.

Lifecycle and replacement

Engineering field	Interpretation / condition
Conversion-board status	The production lifecycle phase of IS200VRTDH1DAC is unconfirmed.

Lifecycle and replacement - continued

Engineering field	Interpretation / condition
Configuration asset	Retaining the detector-curve and group-configuration record is essential to a VRTD replacement even when the physical rack connection is unchanged.
Replacement review	An alternative temperature-input platform must reproduce the installed detector excitation, lead compensation and curve behavior; channel count alone is insufficient.

Available Unit Details

Engineering field	Interpretation / condition
Offered rack hardware	IS200VRTDH1DAC is the H1D VRTD processing board, preserving AC as the complete revision identity.
Measurement allocation	The sixteen-input design is divided into two configurable groups; connected TRTD/DRTD field terminations are separate hardware.
Transport information	The supplied size is 2cm x 18.5cm x 26.1cm, with a weight estimate of 0.3 kg. Installed sensor curves are project data.

Alternative Names

Variant	Complete-model spelling
1	GE IS200VRTDH1DAC
2	General Electric IS200VRTDH1DAC

Technical notes

Engineering field	Interpretation / condition
Recovery timing	An automatically reinstated channel can take up to the documented 20-second recovery interval; compare that behavior with manual-reinstatement configuration after repairing the circuit.
Electrical range	The 0.3532-4.054 V input electrical span is an internal measurement boundary, not a common operating temperature range for all detectors.

Technical notes - continued

Engineering field	Interpretation / condition
Channel identifiers	A connector ID contains the termination type and location. A wrong terminal/cable identity must be corrected before a curve or calibration adjustment is used to explain the fault.

Technical questions

Full-model question	Engineering answer
Why do eight inputs on IS200VRTDH1DAC show a different response time from the other eight?	Group A and Group B have independent rate/filter settings. Compare the two group configurations and use the same controlled resistance transition before attributing the difference to the sensor wiring.
How should a Pt100 test above 190 ohms be planned for IS200VRTDH1DAC?	The Gain 2.0 accuracy provision is conditioned on resistance below 190 ohms. Review the configured gain and intended working region; do not extend that accuracy implication beyond its stated resistance condition.
Can IS200VRTDH1DAC use one generic Pt100 curve for every platinum detector?	Several Pt100 characteristics are selectable. Match the actual detector standard, then compare resistance/temperature points across the required range; a common 100-ohm nominal value does not establish identical conversion.
What does diagnostic 156 mean when IS200VRTDH1DAC is commissioned in TMR?	The configured 25 Hz rate is incompatible with TMR. Restore the supported 4 Hz setting with the appropriate 50/60 Hz rejection, then verify the configuration and channel diagnostics.
Why can IS200VRTDH1DAC continue to report a repaired input as invalid?	The channel may remain removed from scan or latched according to recovery configuration. Check present resistance, the original hardware diagnostic and reinstatement/reset state before making another hardware change.
How can IS200VRTDH1DAC help distinguish a wrong curve from a cable compensation error?	Compare a known resistance applied at the termination with the selected linearization, then repeat through the field leads using the approved three-wire method. A terminal test that passes while the field-path test fails directs investigation to leads/connections.
Why should an unused input on IS200VRTDH1DAC be disabled rather than assigned a fictitious resistance?	Unused is a supported channel selection that removes an absent detector from scanning. A fabricated valid value hides the true channel allocation and can mislead the temperature application.

Technical questions - continued

Full-model question	Engineering answer
What should be checked when IS200VRTDH1DAC indicates a cable-ID failure on J3 or J4?	Trace the named connector and termination identity, then inspect its cable and seating. This is an interface-identification path; changing detector coefficients does not repair a failed ID connection.

Downloads

Document	Content and format
Technical reference	Original GEH-6421H system-architecture pages for the RTD processing architecture. PDF, 2 pages.
Engineering guide	Apter Power field guide: group gain/filter settings, resistance simulation and reinstatement. PDF, 2 pages.

What happens after you enquire

Engineering field	Interpretation / condition
1 Review your reference	Send the full marking, quantity and label photos. We review the item and any version details that need clarification.
2 Confirm the offer	Check the quoted reference, condition, included items and expected dispatch date before approving your order.
3 Arrange dispatch	Confirm delivery details and receive the tracking number when it becomes available.

Ordering checks

Engineering field	Interpretation / condition
Match the complete marking	Include IS200VRTDH1DAC and every hardware or assembly-revision marking visible on the item. Keep the exact reference on your enquiry and quotation.
Check the offered item before ordering	Request available label and interface photos. Have your maintenance team compare the offered IS200VRTDH1DAC reference with the installed equipment and applicable General Electric documentation.

Sourcing and service information

Engineering field	Interpretation / condition
Title-area support	Sourcing Support; 12-Month Warranty
Dispatch Confirmation	Quantity and dispatch date confirmed in quotation.
Dedicated Manager	Personalized one-to-one VIP service
ISO 9001:2015 Certified	Trusted quality management
Warranty Policy	Review the applicable warranty coverage and claim process.
Return Notice	Obtain return approval before sending an item back.
Shipping Method	Worldwide shipping; freight and timing confirmed in quotation.
Parts Availability	Quantity, dispatch date and lead-time start confirmed in quotation.

Technical basis

GE Mark VI System Guide GEH-6421H, Volume I; GEH-6421M, Volume II

Related platform references - separate selection review

General Electric IS200TSVOH1BDC	Servo Valve Terminal Board
General Electric IS200VSVOH1BEF	Servo Control Processor Board

Engineering contact

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