General Electric IS200TBAIH1CDD

Complete Product Information

Product role

This Mark VI terminal board connects analog field circuits to a VAIC processor. Its H1C generation is the documented partner for VAICH1D-or-later hardware, which changes the supported 20 mA output loading compared with the earlier terminal generation.

Published product summary

Summary field	Published information
Product type	Analog Input/Output Terminal Board
Manufacturer part number	IS200TBAIH1CDD
Shipping	Swift global dispatch
Condition	New, original product
Shipping size (est.)	33cm x 10cm x 2.5cm
Country of Origin	USA

Native product information

Product field	Published information
Manufacturer	General Electric
Product Category	Gas Turbine Control

Native product information - continued

Product field	Published information
Spare Part Number	IS200TBAIH1CDD
Weight	0.3 kg
Tariff Code	8537101190

Overview

General Electric IS200TBAIH1CDD separates field-loop conditioning from rack conversion, allowing the terminal settings to be checked before a VAIC channel is condemned.

Generation match	H1C termination pairs with VAICH1D or later.
Loop selection	Current/voltage jumpers must agree with the transmitter circuit.
Redundant wiring	JR1, JS1 and JT1 carry separate processor paths.

Selection and adjacent choices

The H1C interface in IS200TBAIH1CDD serves the later VAIC generation. Earlier VAICH1C-and-before processing uses TBAIH1B-or-earlier or DTAI; later VAICH1D processing uses TBAIH1C-or-later or STAI. This is a functional pairing boundary, so a terminal replacement must preserve the processor generation as well as the field-terminal numbering.

Operating relationship

The transmitter input type is established at the termination. Eight inputs per TBAI provide voltage or 4-20 mA selection, while two additional circuits support 4-20 mA or the low-current range. The field source, its power arrangement and the terminal jumper must be reconciled before software scaling is applied; changing engineering units cannot correct the wrong electrical input circuit.

Integration implications

In simplex service JR1 provides the rack connection. TMR adds JS1 and JT1, distributes each input to the three VAICs, and diode-ORs transducer power from the racks. The current outputs use processor feedback and median-current operation, so measuring only one disconnected processor leg does not establish the complete loop output.

Technical parameters

Parameter	Value / condition
Analog inputs	10
Analog outputs	2
Processor connectors	3 x DC-37
Current input selections	4-20 mA; +/-1 mA
Voltage input selections	+/-5 V; +/-10 V
Output 1 selections	0-20 mA; 0-200 mA
Output 2 range	0-20 mA
20 mA load, matched later generation	800 ohm
200 mA load	50 ohm
Transducer supply current	21 mA continuous per connection
Transducer supply voltage	24 V DC
Available later-generation output drive	Up to 18 V at terminals

Parameter applicability

The H1C terminal functions and later-VAIC pairing apply to the offered DD revision at board-family level. Output load values require the specified processor generation, field wiring and receiver conditions.

System and supply context

The TBAI H1C field interface carries ten analog inputs and two current outputs for a later-generation Mark VI VAIC path.

Integration boundary

One terminal group occupies one processor-cable destination; a full VAIC allocation uses two groups with separately configured channel ranges.

Applications / Compatibility

Powered transmitter termination

Use the terminal-supplied 24 V circuit only for a transmitter whose consumption fits the individual supply limit.

Externally powered analog inputs

Preserve the source return and the selected current/voltage circuit; an external supply must not be treated as the terminal excitation source.

High-burden output loops

Evaluate receiver resistance plus installed wire resistance against the matched later-generation output drive.

TMR analog distribution

Keep R, S and T cable identities distinct so rack diagnostics can be traced to the correct terminal connection.

Precautions scope

Separate transmitter power, selected input circuits and the load-connected output before restoring terminal authority.

Installation precautions

Engineering field	Interpretation / condition
De-energize the field path	Isolate external transmitter supplies as well as the rack before disturbing the TBAI terminals.
Record electrical selectors	Save the actual jumper positions by channel, distinguishing the eight general inputs from the two low-current-capable inputs.

Installation precautions - continued

Engineering field	Interpretation / condition
Separate output ranges	Verify the selectable first output independently of the second 20 mA output before attaching a receiver.
Keep returns traceable	Identify signal return and transducer power return before moving conductors; a correct signal number does not establish its return path.
Restrain rack cables	Seat and latch each DC-37 connection in its recorded JR1/JS1/JT1 location without transferring cable load to the connector.
Check the complete loaded loop	Measure actual current with the receiver connected and compare it with command and channel feedback before removing the isolation.

Lifecycle and replacement

Engineering field	Interpretation / condition
Model status	The manufacturing lifecycle phase of IS200TBAIH1CDD is unconfirmed.
Replacement boundary	Retaining H1C preserves the later-VAIC termination relationship; changing to an earlier TBAI generation requires a processor/output-burden review.
Maintainable interface	A terminal-board exchange preserves the existing transmitter allocation; it does not by itself renew the VAIC processor or field instruments.

Available Unit Details

Engineering field	Interpretation / condition
Offered terminal identity	IS200TBAIH1CDD identifies the H1C analog termination, including the DD revision marking.

Available Unit Details - continued

Engineering field	Interpretation / condition
Assembly function	The offered item is the field interface, not the rack conversion board; two TBAI groups make up the full VAIC channel allocation.
Physical record	The supplied transport estimate is 33cm x 10cm x 2.5cm and 0.3 kg; jumper positions and connected field wiring are installation-specific.

Alternative Names

Variant	Complete-model spelling
1	GE IS200TBAIH1CDD
2	General Electric IS200TBAIH1CDD

Technical notes

Engineering field	Interpretation / condition
Transducer power	The 21 mA continuous limit applies to an individual transducer-supply connection, not to the selectable 200 mA analog output.
Burden calculation	An 800 ohm receiver at 20 mA uses 16 V. The later pair provides up to 18 V at the terminals; wire and connection losses must remain within the available margin.
Terminal identification	The read-only ID includes board type, revision, serial identity and connector location, allowing a cable-location mismatch to be distinguished from a bad transmitter.

Technical questions

Full-model question	Engineering answer
Why can IS200TBAIH1CDD report hardware incompatibility after a cable exchange?	VAIC interrogates the termination ID and connector location. Compare the diagnosed JR/JS/JT location with the cable labels and rack destination before replacing an analog component.

Technical questions - continued

Full-model question	Engineering answer
How can the current-conversion path of IS200TBAIH1CDD be checked without changing engineering scaling?	For the documented 4-20 mA circuit, the 250 ohm conversion resistor gives 1-5 V across that path. With the loop isolated for the approved test, compare injected current and the corresponding conversion voltage before adjusting software scale; a wrong electrical selection cannot be corrected by changing displayed units.
How should a current input on IS200TBAIH1CDD be tested when a voltage source gives a plausible reading?	Identify whether the channel uses the current-conversion circuit or the voltage circuit, then inject the intended electrical quantity with the loop isolated. A plausible scaled value from the wrong source is not an input-type acceptance test.
Why can one rack lose a measurement through IS200TBAIH1CDD while the other two remain healthy?	In TMR the three processor-cable paths are separate even though the field signal is shared. Compare rack-specific readings and the affected cable connection before opening the common field loop.
What does a transducer-supply short on IS200TBAIH1CDD mean for output troubleshooting?	Treat the protected transmitter supply separately from current-output regulation. Check the transmitter branch for a short and verify the receiver loop independently rather than assuming both use the same current limit.
How can IS200TBAIH1CDD be accepted with an externally powered transmitter?	Confirm the approved common/return relationship and electrical range, then exercise the transmitter or an isolated source at low, middle and high points. Record both the physical signal and the VAIC engineering value.
Why can TMR output current through IS200TBAIH1CDD differ from a measurement on one processor leg?	The connected output is formed by the redundant drive and feedback arrangement. Evaluate the actual field-loop current and the individual VAIC diagnostics together; a disconnected leg is not a representative load condition.
What should be recorded if IS200TBAIH1CDD develops a range-dependent error?	Capture the selected input/output circuit, actual source or receiver value, field-loop loading and corresponding rack reading at several points. A repeatable gain error calls for range/scaling review, whereas a load-dependent output collapse calls for loop-burden investigation.

Downloads

Document	Content and format
Technical reference	Original GEH-6421H system-architecture pages for the VAIC/TBAI analog path. PDF, 3 pages.
Engineering guide	Apter Power field guide: transmitter branches, output compliance and terminal-ID diagnosis. 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 IS200TBAIH1CDD 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 IS200TBAIH1CDD 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

Sourcing and service information - continued

Engineering field	Interpretation / condition
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 IS200VAICH1DBC	Analog Input/Output Processor Board
General Electric IS200TRTDH1CC	Resistance Temperature Detector Terminal Board

Engineering contact

Discuss the complete unit and installed application with Apter Power.
sales13@apterpower.com | +86 18030235313