

INDUSTRIAL AUTOMATION PRODUCT

FC-TSHART-1620M

Sixteen-Channel Safe HART Input FTA

Honeywell FC-TSHART-1620M is a 16-channel safe HART input FTA. It conditions transmitter loops for an SAI-1620m module and presents the HART signal to a multiplex unit.

IDENTITY	VERIFIED VALUE
Manufacturer	Honeywell
System family	Safety Manager
Part number	FC-TSHART-1620M
Country	USA
HS code	8537101190

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FC-TSHART-1620M

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Technical Specifications

Technical values below are limited to the named Honeywell product record.

PARAMETER	TECHNICAL VALUE
Input channels	16; 2 groups of 8
External supply	30 Vdc; 3 mA without loop loads
Input current	0 to 25 mA
Input resistance	250 ohm +/-1%
Output to SAI-1620m	0 to 4 Vdc
Accuracy	0.10%
HART multiplex output	5 V peak-to-peak maximum
Fuse	315 mA

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System Role and Architecture

Honeywell FC-TSHART-1620M is a 16-channel safe HART input FTA. It conditions transmitter loops for an SAI-1620m module and presents the HART signal to a multiplex unit.

FUNCTION 1

Terminates safety-related analog input loops

FUNCTION 2

Provides HART multiplex access

FUNCTION 3

Interfaces passive transmitters to SAI-1620m

FUNCTION 4

Organizes field loops around documented common references

Matched system components

- SAI-1620m safe analog input module
- 30 Vdc external loop supply
- HART multiplex unit
- Passive 4-20 mA transmitters

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Applications and Engineering Context

Safety pressure transmitters

Terminates safety-related analog input loops

HART fire-and-gas loops

Provides HART multiplex access

SIL analog measurement

Interfaces passive transmitters to SAI-1620m

Safe transmitter diagnostics

Organizes field loops around documented common references

TECHNICAL NOTE

Keep the documented channel commons separated, verify the loop supply and confirm both analog accuracy and HART communication.

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5 Engineering Precautions

- 1 Verify the complete FC-TSHART-1620M marking and the assigned Safety Manager position before field work.
- 2 Isolate the applicable power, network and field energy before disconnecting FC-TSHART-1620M.
- 3 Use ESD controls and protect the keyed connectors of FC-TSHART-1620M during handling.
- 4 Record the installed wiring, jumpers, node or channel assignment before replacement.
- 5 Confirm SAI-1620m safe analog input module and 30 Vdc external loop supply against the approved system configuration.
- 6 Restore FC-TSHART-1620M under controlled conditions and review the product-specific diagnostics.
- 7 Complete a functional test for safety pressure transmitters before production release.

MANUFACTURER SOURCE RECORD

Honeywell Safety Manager Hardware Reference

EP-SM.MAN.6284 Issue 2.1

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