

MANUFACTURER-SOURCE TECHNICAL REFERENCE

Honeywell 8C-PAIHA1 51454470-275

Product Reference

Honeywell Series 8 16-Channel HART Analog Input Module

DOCUMENT SCOPE

Independent Apter Power manual compiled only from the cited Honeywell manufacturer sources. No product photograph is included.

Product / lookup identity	Honeywell 8C-PAIHA1 51454470-275
Reference number	8C-PAIHA1
Document basis	Published Honeywell product records, PDFs, and manuals listed on page 3



Product page

<https://www.apterpower.com/Honeywell/8c-paiha1-51454470-275>
Apter Power contact

sales13@apterpower.com | +86 180 3023 5313

Product role and published parameters

WHAT IT IS, WHAT IT DOES, AND WHERE IT FITS

Honeywell 8C-PAIHA1 is a coated, 16-channel Series 8 high-level analog input module with HART; the supplied 51454470-275 material number must be confirmed from the physical nameplate. The module converts high-level current signals from two-wire or self-powered transmitters into digital process data for the Honeywell controller and also carries HART information for device configuration, status and additional...

Published field	Manufacturer-published value or verified identity note
Official model description	8C-PAIHA1 – Analog Input with HART (16), Coated; high-level AI HART, single-ended
Input type	Current from 2-wire or self-powered transmitters; 16 single-ended channels
Input range	4–20 mA through 250 ohms
A/D resolution	16 bits
Module supply rating	24 V dc; 110 mA module current rating
Input scan rate	50 ms
Hardware accuracy	±0.075% of full scale at 23.5°C ±2°C; ±0.15% of full scale from 0 to 60°C

System function and signal path

01	The module converts high-level current signals from two-wire or self-powered transmitters into digital process data for the Honeywell controller and also carries HART information for device...
02	All 16 channels are single-ended 4–20 mA current inputs through 250 ohms. A 16-bit A/D converter, 50 ms scan and specified filtering/rejection support process measurement, while HART data can...
03	The coated module plugs into a Series 8 IOTA: 8C-TAIXA1 for non-redundant configurations or 8C-TAIXB1 for redundant configurations. It is part of Honeywell Series 8 I/O used with C300-based...

Applications, answers, and official sources

1 4-20 mA process measurement: Acquires 16 single-ended current loops from field transmitters for continuous monitoring and control.

2 HART device configuration and status: Carries HART information used to configure supported field devices and read device status.

3 Multivariable transmitter integration: Makes supported HART secondary and tertiary variables available for process-control use in addition to the primary 4-20 mA value.

4 Redundant Series 8 analog input: Uses the 8C-TAIXB1 redundant IOTA where the engineered Honeywell system requires redundant I/O.

Frequently asked questions

What is Honeywell 8C-PAIHA1?	It is a coated Series 8 high-level analog input module with HART, providing 16 single-ended current-input channels.
How many channels does 8C-PAIHA1 have?	Honeywell specifies 16 single-ended analog input channels.
Which input signal does 8C-PAIHA1 accept?	It accepts 4-20 mA current signals through 250-ohm input paths from two-wire or self-powered transmitters.
Does 8C-PAIHA1 support voltage or differential inputs?	No. Honeywell explicitly notes that this model supports neither differential nor voltage inputs; those specifications must not be copied from 8C-PAIH54.
What does HART add to the analog input?	HART supports device configuration and status and can expose secondary or tertiary transmitter variables for process-control use.
Which IOTA is compatible with 8C-PAIHA1?	Honeywell lists 8C-TAIXA1 for coated non-redundant use and 8C-TAIXB1 for coated redundant use.

Official Honeywell sources

Series 8 Controller and I/O Specification	https://prod-edam.honeywell.com/content/dam/honeywell-edam/pmt/hps/products/pmc/modular-systems/experion-lx/hon-ia-pmc-experion-lx-series-8-specificationsheet-en.pdf
Series 8 Controller and I/O Specification	https://prod-edam.honeywell.com/content/dam/honeywell-edam/pmt/hps/products/pmc/modular-systems/experion-lx/pmt-hps-S803-150-110-20-v1.2.pdf