

Hart Communications

The 709H adds HART communications and supports a select set of the HART universal and common practice commands. This makes the 709H unique as both an affordable, compact loop calibrator and powerful HART communication troubleshooting tool.

In the communicator mode the user will be able to read basic device information, perform diagnostic tests, and trim the mA output on most HART enabled transmitters. In the past, this could only be done with a dedicated communicator, a high-end multifunction calibrator, or a laptop computer with HART modem. 709H will allow virtually any technician to service and support HART devices.

Supports HART general instructions and general application instructions. Able to read the device basic information, perform diagnostic testing and calibration to fine tune most HART transmitter, can store up to 20 HART device configuration file.



Performance Index

Output Performance Index (applicable to temperature range from 18°C to 28°C, within one year after calibration)

Output	Range	Output Range	Resolution	Accuracy	Remark
DCA	20mA	0.000 ~ 22.000mA	0.001mA	±0.01% Set Value ±0.015% Range	Max. load 1KΩat 20mA.
Simu-transmitter (Absorption Current)	-20mA	0.000 ~ -22.000mA	0.001mA	±0.01% Set Value ±0.015% Range	Max. load 1KΩat 20mA. Note: power supply range: 5 ~ 25VDC
Loop Power Supply	24V			±10%	Max. output current up to 25mA.

Input Performance Index (applicable to temperature range from 18°C to 28°C, within one year after calibration)

Input	Range	Output Range	Resolution	Accuracy	Remark
Voltage	28V	-2.000 ~ 28.000V	1mV	±0.01% Reading ±0.01% Range	Input resistance about 1MΩ
Current	30mA	-4.000 ~ 33.000mA	0.001mA	±0.01% Reading ±0.01% Range	Input resistance about 20Ω
Loop Current	20mA	0.000 ~ 22.000mA	0.001mA	±0.01% Reading ±0.01% Range	providing 24V loop power

GENERAL SPECIFICATIONS

Power supply	: four 1.5V alkaline batteries (LR6)
Battery life	: about 360mA /5V under the condition of 20mA with 1kΩ load
Max. permitted voltage	: 30V (between any two terminals or between any terminal and earth ground)
Operating temperature	: 0°C ~ 50°C
Operating relative humidity	: ≤ 80%RH
Storage temperature	: ≤ - 20°C ~ 60°C
Relative humidity for storage	: ≤ 90%RH
Temperature co-efficiency	: 0.1×Basic accuracy / °C (Temperature <18°C or >28°C)
Protection level	: IP65(Dust, Water spray)
Display	: 3.2 inch TFT color display
Size	: 206(L) × 97(W) × 60(D) mm
Weight	: 600g
Safety	: EN61010-1:2001
Accessories	: Test Pen, Industrial test lead, Crocodile clip, Quick guide, Product qualification certificate, Product user manual, Insurance tube, 5 x alkaline battery
Optional	: PC infrared communications accessories package, Linear power adapter (DC5V), Hook type tester