

# Differences compared to loop tools and communicators

710 Value Add	Advantage or Benefit
Source mA signals and interrogate HART info	Enables real time comparisons of where the valve should be in its' stroke vs where the HART feedback says it is.
Precision loop functions	Best in class accuracies for a loop calibrator means users can have high confidence in the sourcing and measuring of mA signals. 710 accuracies equal the 709 family with precision accuracies. Superior to other loop calibrators and ProcessMeter® test tools
HART Communication built-in	Test HART smart valves, perform light configuration on transmitters, trim mA output signals to agree on transmitters
Dedicated tests for easy test of control valves	Some of these functions exist in communicators but not easy to operate. Often need an external loop calibrator AND a communicator to do what the 710 does
Logging functions like the 709H	Capture and store HART device configurations. Perform measurement logging for loop tuning and analysis after upload to 709Htrack

**The 710 delivers simple valve test answers and a high performance loop calibrator**

# Fluke 710 mA Loop Valve Tester

**FLUKE**



	705	707	709	709H	710	475	Trex	Quiklook 3-fsr
	Fluke	Fluke	Fluke	Fluke	Fluke	Emerson	Emerson	Fisher
Price	\$869.99	\$919.99	\$999	\$1,350	\$2,499	\$4,999	\$6,999	\$50,000
Description	Basic mA calibrator. Up/Down arrows select mA source values. Can source mA into analog valves up to 1000 Ω load.	Basic mA calibrator. Simple rotary dial to quickly select mA source values. Can source mA into analog valves up to 1200 Ω load.	More advanced mA calibrator. Simple menu, rotary dial and ramping features. Analog valve test feature which can source mA into analog valves up to 1200 Ω load.	HART capable mA calibrator. Simple menu, rotary dial and ramping features. Analog valve test feature which can source mA into analog valves up to 1200 Ω load.	Simple, easy, intuitive. Supports both HART Valves and analog valves. At-a-glance health status in under 5mins. Free software allows for light diagnostics allowing for smart deployment of resources.	Configures and reads smart positioner data, does not ensure correct information and does not source mA.	Light diagnostics, complicated UI, requiring domain expertise. Does not give full diagnostics, still requiring high end tool. Set up time is 4X.	Full Valve diagnostics, 1-2hr setup time. Expert level knowledge requires. Requires shutdown.
Operation	Pushbutton Controls	Thumbwheel Control	Thumbwheel Control	Thumbwheel Control	Thumbwheel Control	Pushbutton and Touchscreen Control	Touchscreen	Touchscreen
Dimensions	2.2 x 3.0 x 6.3 in	2.2 x 3.0 x 6.3 in	6.0 x 3.7 x 1.7 in	6.0 x 3.7 x 1.7 in	6.0 x 3.7 x 1.7 in	10 x 5.3 x 1.7 in	7.9 x 5.6 x 2.4 in	N/A
Weight	21.2 oz	21.2 oz	17.5 oz	17.5 oz	17.5 oz	26.4 oz	46.4 oz	N/A
mA Accuracy	0.025%	0.015%	0.01%	0.01%	0.01%	-	-	-
Ramping	x	x	x	x	x	x	x	x
Loop Power	x	x	x	x	x	-	x	x
Max Source Load	1000 Ω	1200 Ω	1200 Ω	1200 Ω	1200 Ω	-	-	-
Analog Valve Tests	x	x	x	x	x	-	x	x
HART Smart Valve Test	-	-	-	-	X	-	x	x
Software & Cable	-	-	-	\$399	X	-	\$\$	\$\$
Intrinsically Safe	-	+\$460	-	-	-	x	\$\$	x
HART Communication	-	-	-	X	X	x	x	x
HART Resister	-	-	X	X	x	-	x	x
HART Valve Test Time	-	-	-	-	5mins	-	20mins	60mins
Quick Health Status	-	-	-	-	x	-	-	-

## Average Future Needs Savings

**\$2,500-\$8,000**  
Savings on HW

## Average Downtime Avoidance

**\$25,000 - \$500,000**  
Unplanned Event

## Average OpEx Savings

**\$85-330**  
Savings per Task