

771/772/773 Milliamp Clamp Meter

The Fluke mA Clamp Meters will save you time and money. These charts show you how based on features/benefits and then in dollars and cents.

Product category/ major features	General benefits	Specific benefits	Value	771	772	773
Measure mA signals for PLC and control system analog I/O without breaking the loop	Measures low level dc current	Correlate process indication with real physical value	Saves process downtime—and money for automation professionals	•	•	•
Measure output signals from transmitters without breaking the loop	Maintain and troubleshoot process and automation equipment without breaking the loop	No disruption to the process	Saves process downtime—and money for instrumentation professionals	•	•	•
Detachable clamp with extension cable	Measurements in tight locations	Enables measurements in difficult situations	Measurements can be quickly carried out	•	•	•
Source, simulate and measure mA signals in circuit (break the loop)	Confirm non-contact measurement. Have the next tool in hand for troubleshooting (source simulate)	Eliminates need to return to shop to get a loop calibrator for troubleshooting after finding a bad signal with non-contact measurement	Helps speed up loop troubleshooting—saves time and money		•	•
Source and measure V dc	Troubleshoot voltage input and output devices	Measure presence of 24 V loop power. Measure 1 to 5 or 0 to 10 V process signals.	Eliminates need to return to shop to get a voltage source tool or a DMM. Saves time and money.			•
4 to 20 mA in/out	Dual channel mA source and measurement for troubleshooting	Source 4 to 20 mA signals into valves and signal conditioners and simultaneously measure 4 to 20 mA positioning output signals.	Quick troubleshooting of devices with mA inputs and outputs. Save time and money.			•
4 to 20 mA scaled output	Scaled mA output provides a mA signal output representative of the measured mA value	Connect a logging DMM and log the mA signal without breaking the loop	Troubleshoot and document intermittent or erratic 4 to 20 mA loop signals.			•
Loop power supply	Power a transmitter	Substitute testing of the installed 24 V loop power supply. Power a transmitter and measure its mA output signal for troubleshooting.	Eliminates need to return to shop to get a power supply. Saves time and money.		•	•
Dual backlit display with both mA measurement and percent of 4 to 20 mA span	Clear measurement presentation	Quick measurement evaluation	Saves time, saves money	•	•	•
Measurement Spotlight	Illuminates hard to see wires in dark enclosures	Measurement process is easier and quicker	Saves time	•	•	•
Measure up to 99.9 mA range non-contact	Wide range of measurements	Measures 10 to 50 mA signals in older control systems	Only one instrument needed for multiple applications	•	•	•
Automatic power off	After 15 minutes and 2 minute automatic off for backlight and spotlight	Saves battery life	Saves money on batteries	•	•	•

In dollars and cents it doesn't take long to cover the cost of the tool



Activity for cost savings	Savings per occurrence	Occurrences per month	Assumed labor* cost/hr	Total monthly savings		
				771	772	773
Time saved not having to remove a wire and break the loop for mA measurements	0.1 hour	25	\$75	\$188	\$188	\$188
Time saved not needing to call the control room to isolate a loop so the loop can be broken without process disruption	0.1 hour	10	\$150	\$150	\$150	\$150
Time saved testing analog I/O on a PLC not needing to check measurements on a console	0.1 hour	20	\$75	\$150	\$150	\$150
Money saved by eliminating catastrophic plant outage caused by accidentally opening a critical loop	\$10,000 or more	0.01		\$100	\$100	\$100
Time saved by not having to return to the shop for a mA loop calibrator to troubleshoot a loop	0.5 hour	6	\$75	\$0	\$225	\$225
Time saved troubleshooting devices with mA inputs and outputs	0.5 hour	4	\$75	\$0	\$0	\$150
Repair of intermittent or erratic 4 to 20 mA loops	1 hour	1	\$75	\$0	\$0	\$75
Totals				\$588	\$813	\$1,038

*Estimated US rate