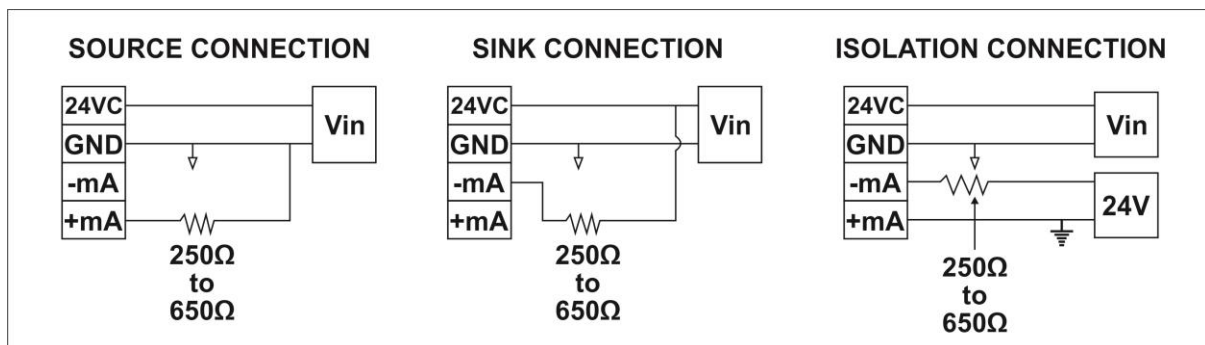Please check the details here on how we connect the source, sink, and isolation connections with the device. We are connecting a 500-ohm resistor externally.

"I have checked the waveform on the CRO while keeping the sink and source connections. We are successfully communicating with HART through the sink connection. Here you can find detailed waveform information of Sink connection.

Image 1.

Transmitter connect in SINK mode CRO prob connect across 500 ohm resistor and receiving query and response signal.
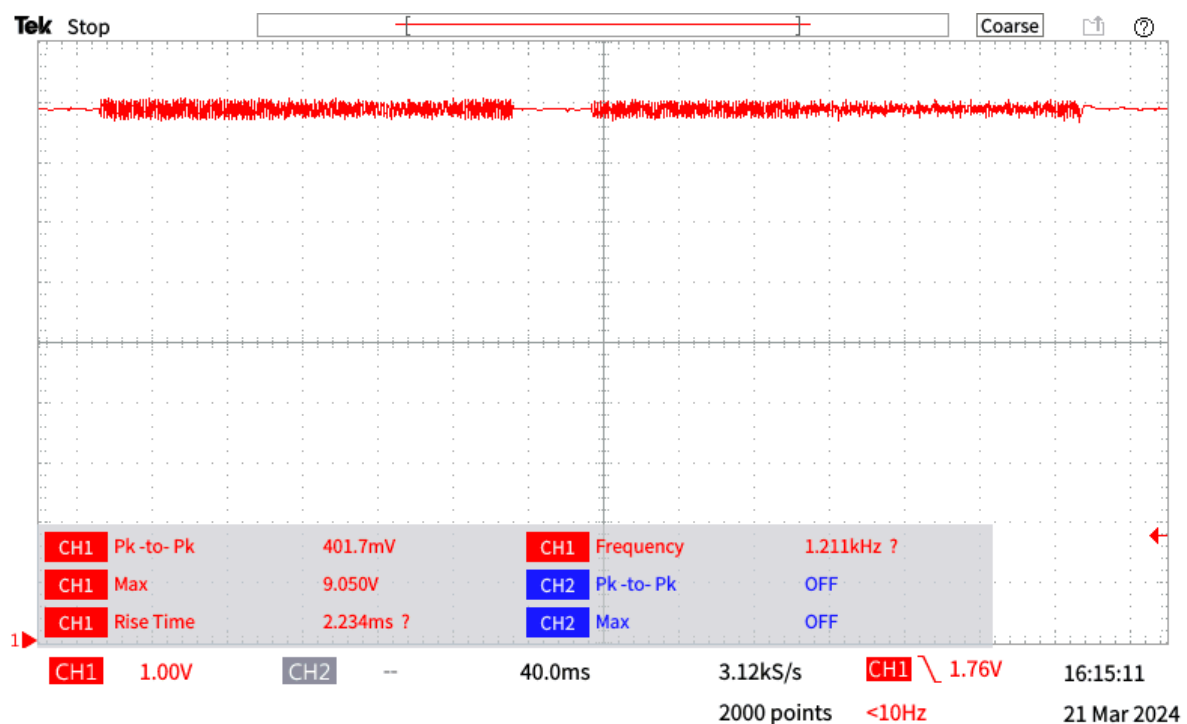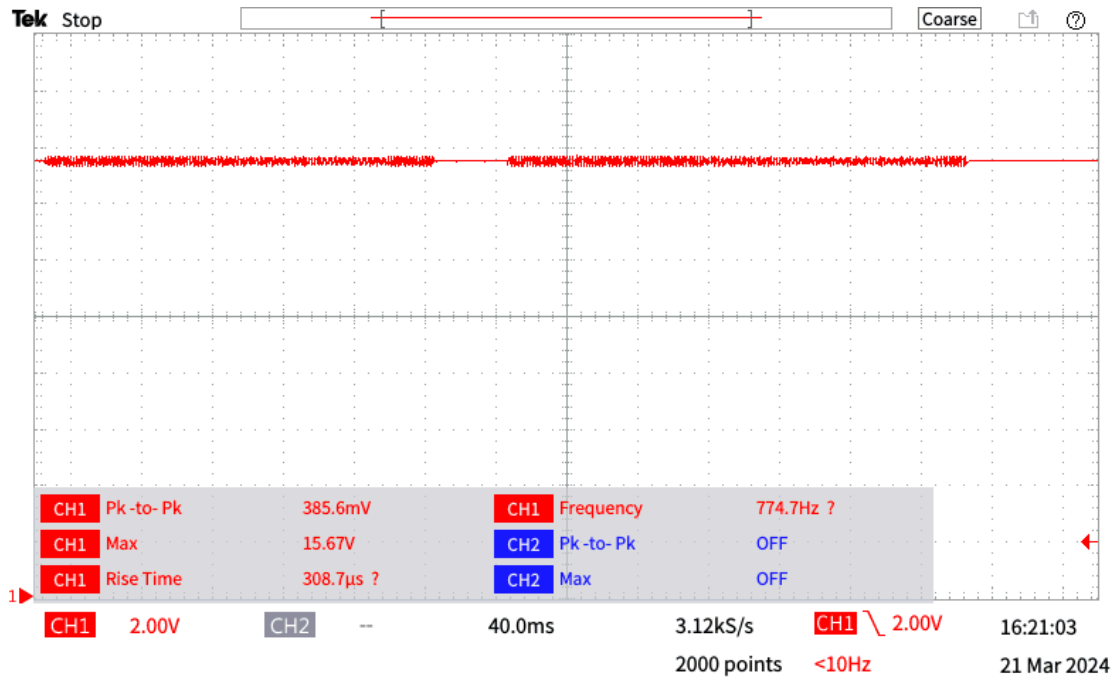
Image 2.

Transmitter connect in SINK mode CRO prob connect across P1 PIN 1 AND PIN 2. and receiving query and response signal.

CH1	Pk-to-Pk	385.6mV	CH1	Frequency	774.7Hz ?
CH1	Max	15.67V	CH2	Pk-to-Pk	OFF
CH1	Rise Time	308.7µs ?	CH2	Max	OFF

CH1 2.00V   CH2 --   40.0ms   3.12kS/s   CH1 \ 2.00V   16:21:03
2000 points   <10Hz   21 Mar 2024

.Image 3.

Transmitter connect in SINK mode CRO prob connect across HART_MOD_IN with respect to DGND. and receiving query and response signal.

CH1	Pk-to-Pk	250.6mV	CH1	Frequency	1.410kHz ?
CH1	Max	1.639V	CH2	Pk-to-Pk	OFF
CH1	Rise Time	297.3µs ?	CH2	Max	OFF

CH1 200mV   CH2 --   40.0ms   3.12kS/s   CH1 \ 1.75V   16:09:22
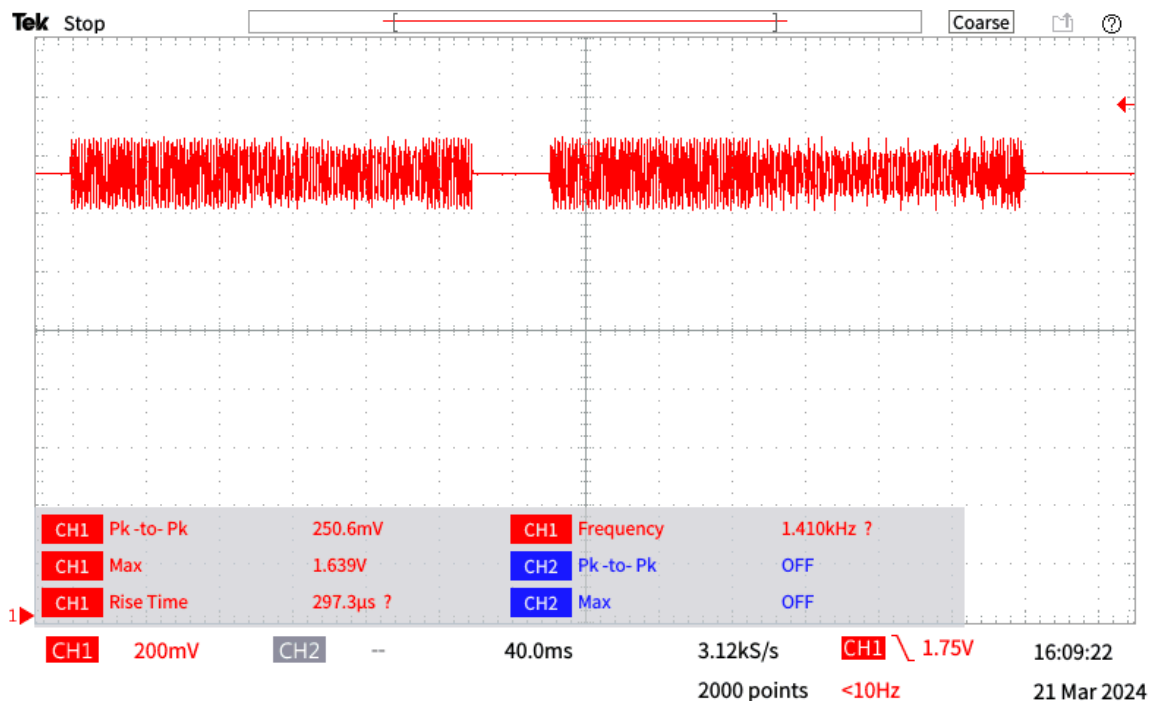2000 points   <10Hz   21 Mar 2024

Image 4.

Transmitter connect in SINK mode CRO prob connect across HART_MOD_IN with respect to GND. and receiving query and response signal.
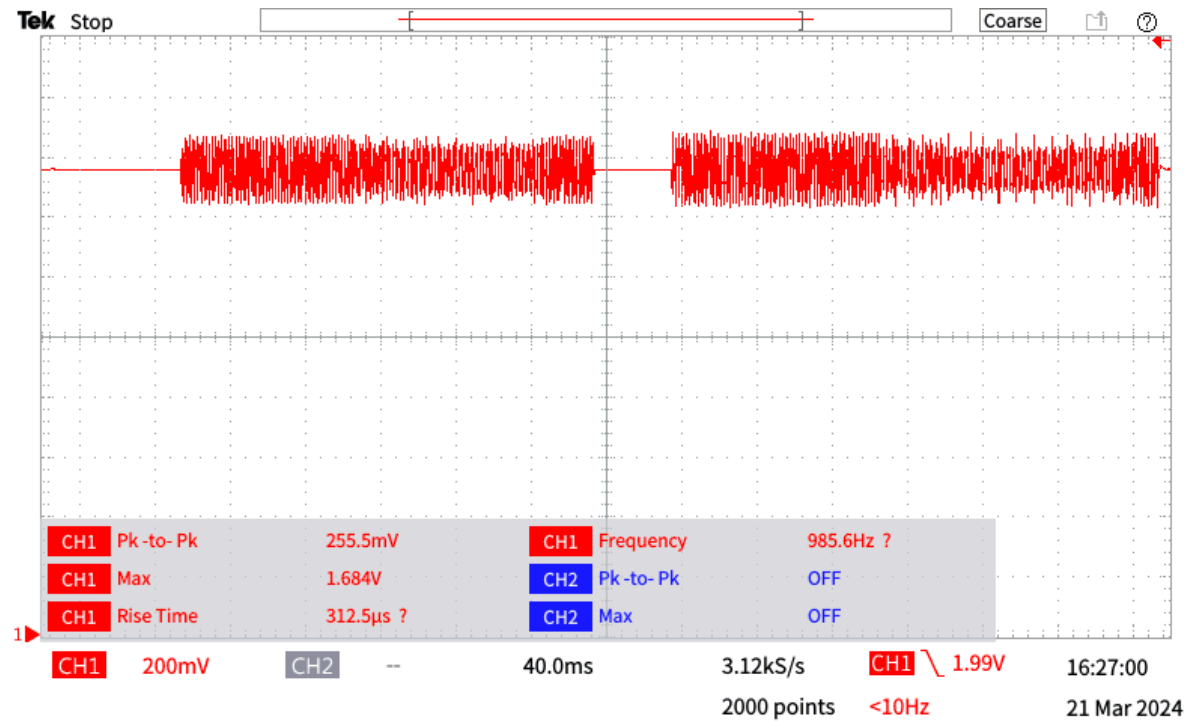

Image 5.

Transmitter connect in SOURCE mode CRO prob connect across 500 ohm resistor and only query sending waveform display on CRO.
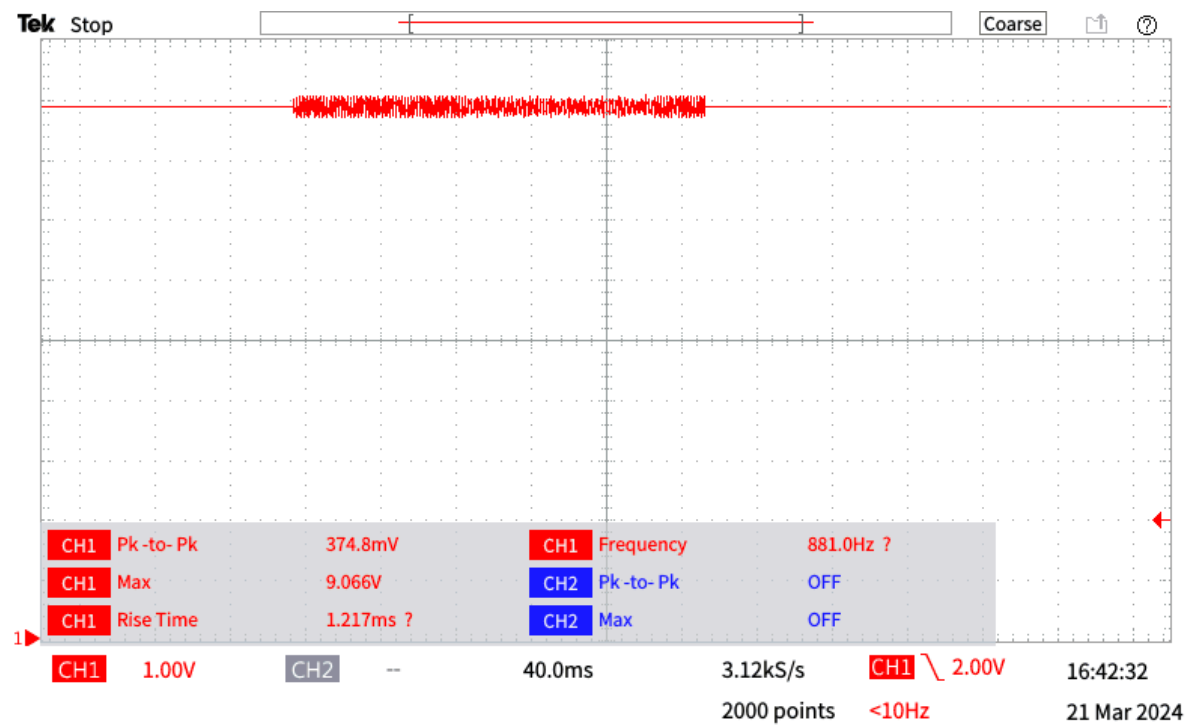
Image 6.

Transmitter connect in SOURCE mode CRO prob connect across P1 PIN 1 AND PIN 2. and only query sending waveform display on CRO.
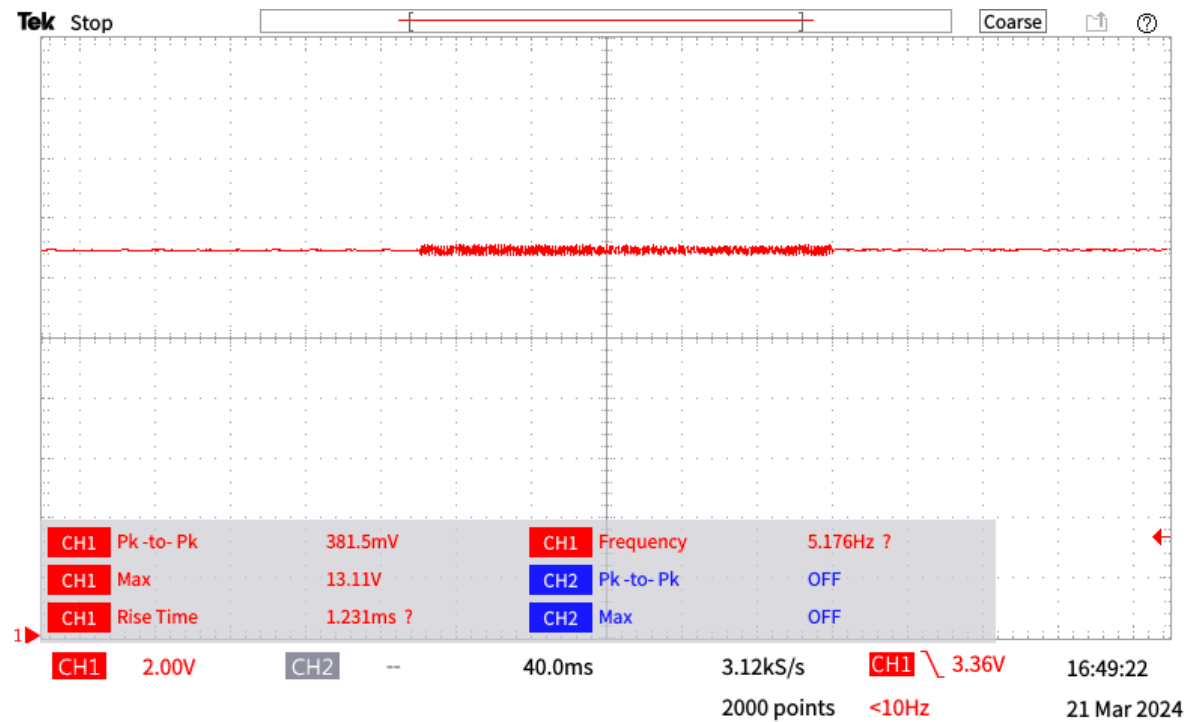

CH1	Pk-to-Pk	381.5mV	CH1	Frequency	5.176Hz ?
CH1	Max	13.11V	CH2	Pk-to-Pk	OFF
CH1	Rise Time	1.231ms ?	CH2	Max	OFF

CH1   2.00V   CH2   --   40.0ms   3.12kS/s   CH1 \ 3.36V   16:49:22
                                                        2000 points   <10Hz   21 Mar 2024

Image 7

Transmitter connect in SOURCE mode CRO prob connect across HART_MOD_IN with respect to DGND. No any signal received.

CH1	Pk-to-Pk	23.53mV	CH1	Frequency	59.18Hz ?
CH1	Max	1.524V	CH2	Pk-to-Pk	OFF
CH1	Rise Time	593.1µs ?	CH2	Max	OFF

CH1   200mV   CH2   --   40.0ms   3.12kS/s   CH1 \ 1.99V   16:43:59
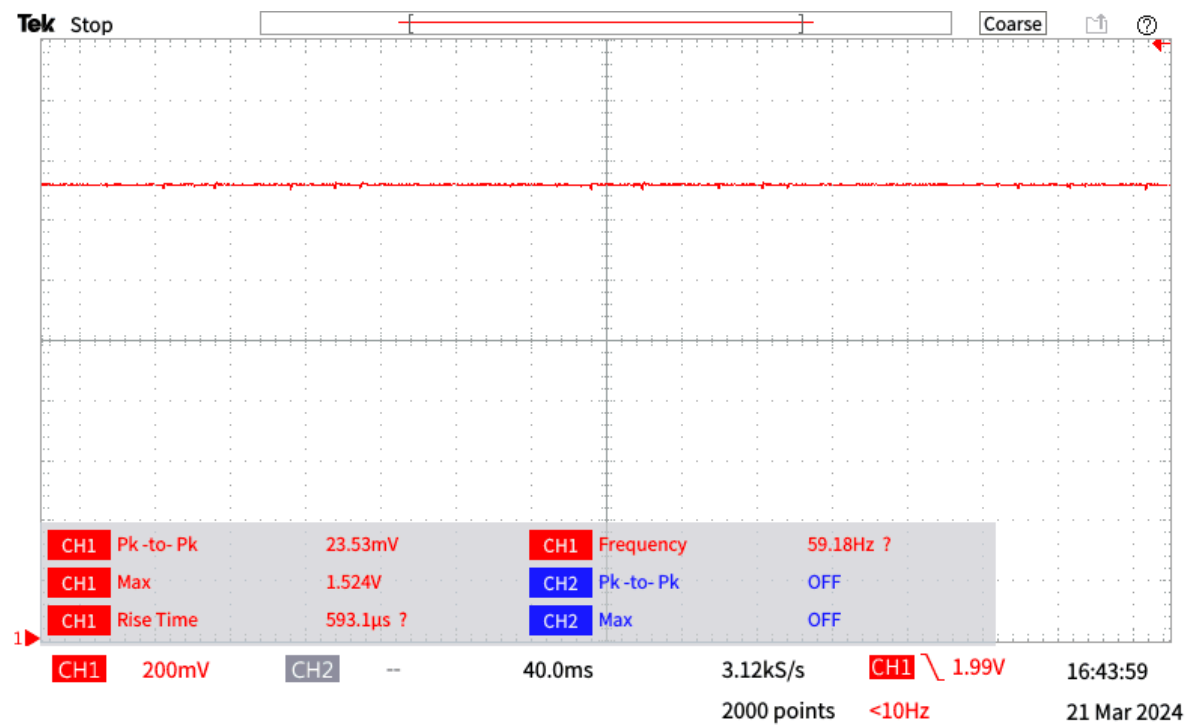   2000 points   <10Hz   21 Mar 2024

Image 8.

Transmitter connect in Source mode CRO prob connect across HART_MOD_IN with respect to GND. and No any signal received.

Tek	Stop			Coarse

CH1	Pk -to- Pk	21.53mV	CH1	Frequency	12.16Hz ?
CH1	Max	1.568V	CH2	Pk -to- Pk	OFF
CH1	Rise Time	504.3µs ?	CH2	Max	OFF

CH1	200mV	CH2	--	40.0ms	3.12kS/s	CH1	1.62V	16:51:51
					2000 points	<10Hz		21 Mar 2024