



# Javelin Series - Signal Conditioner

Part No. [DEFINE-JAVELIN](#)

The Javelin signal conditioner by Define Instruments is a compact, loop-powered, isolated 2-wire transmitter that provides exceptional flexibility for industrial signal conditioning and conversion. Designed for precision and reliability, it accepts a wide range of input signals—including thermocouples, RTDs, NTCs, mA, voltage, and potentiometers—and converts them into a standard 4–20 mA current loop output. With simple USB configuration using Define's ToolBox software, users can quickly program, scale, and monitor live data. The Javelin's slim 12.5mm DIN-rail mount design and superior accuracy ( $< \pm 0.03\%$  FSO) make it ideal for compact, high-performance control and monitoring systems.

## Features

- Universal input – Supports thermocouple, RTD (Pt100/Pt1000), NTC thermistors including ProSense 10 K Type 3, mA, V, mV, and potentiometer signals
- Standard 4–20 mA loop output (or 20–4 mA), with  $< \pm 0.03\%$  FSO typical accuracy
- USB programmable – Easy setup via Define ToolBox software; no power or input signal required during programming ([DEFINE-BRIDGE-KEY](#) required)
- DIN-rail mount design – Slim 12.5mm width for space-efficient installation
- High isolation – 2500 VAC isolation between input and output for superior signal protection.
- Stable performance – Ambient drift  $< \pm 0.003\%$  / °C FSO
- Status LED indicator – Shows startup, normal operation, and sensor fault conditions
- Environmental durability – Operates in  $-4$  to  $+131$  °F ( $-20$  to  $+55$  °C), up to 2000m altitude, 5–85 % RH non-condensing
- Compliance & safety – UL Listed (E473114)
- Compact and lightweight –  $90 \times 12.5 \times 112$ mm [ $3.54 \times 0.49 \times 4.41$ in], only 77g (2.7 oz)
- 5-year warranty

| Define Instruments Javelin Series Signal Conditioner |                                                                                                                                                                                                                                  |                             |                     |             |                     |          |
|------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|---------------------|-------------|---------------------|----------|
| Part No.                                             | Description                                                                                                                                                                                                                      | Manufacturer Specifications | Manufacturer Manual | Weight (lb) | Drawing Link        | Price    |
| <a href="#">DEFINE-JAVELIN</a>                       | Define Instruments signal conditioner, isolated, Input: 1-channel, current/voltage/RTD/thermocouple/thermistor/potentiometer, Output: 1-channel, loop powered current, 10.5–36 VDC operating voltage, IP20, 35mm DIN rail mount. | <a href="#">PDF</a>         | <a href="#">PDF</a> | 0.28        | <a href="#">PDF</a> | \$171.00 |

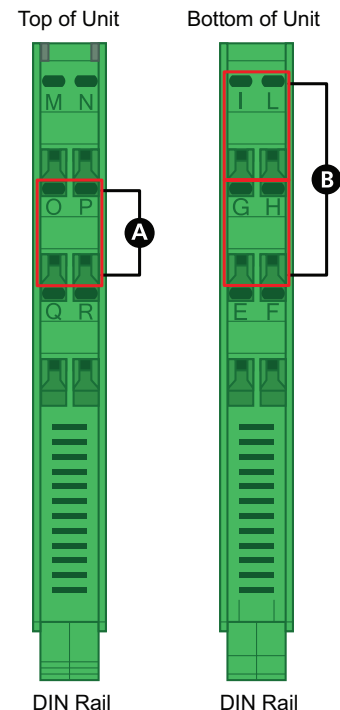
For complete technical and installation information see [Manufacturer Specifications](#) and [Manufacturer Manual](#) links.

## Wiring

See Manufacturer Manual for additional wiring information and other applications.

- A 4–20 mA Output (Terminals O-P, See Manual)
- B Signal Input (Terminals G-H & I-L, See Manual)

Terminals Q-R, M-N and E-F are not used.





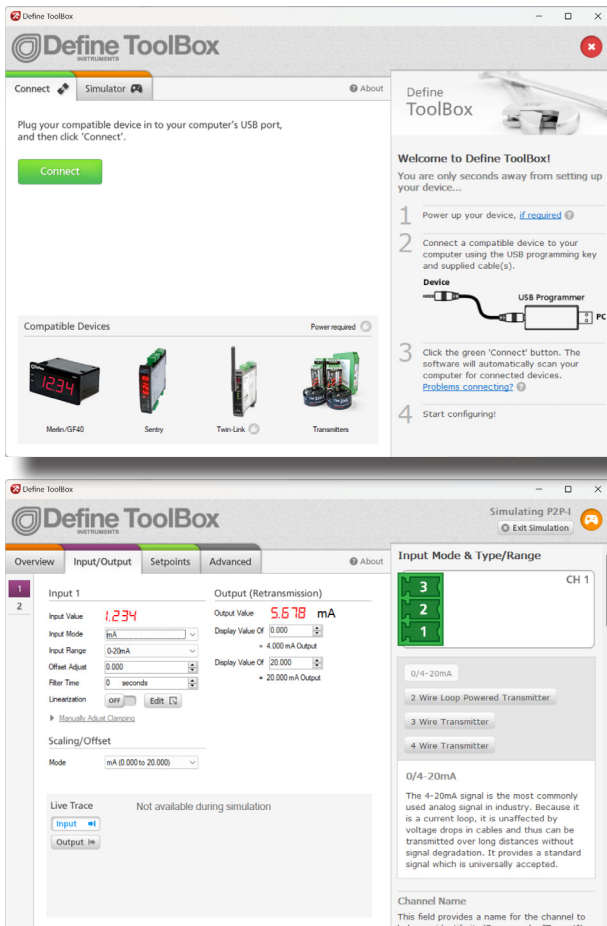
# Define Windows Configuration Software

## DEFINE-TOOLBOX-SW

Easily connect, configure, simulate, and monitor.

### FREE Download

Easily configure and optimize your Define Instruments products with the intuitive ToolBox software. Designed for simplicity and power, ToolBox enables rapid setup of Define Instruments universal analog inputs, 4–20 mA outputs, digital I/O, and other product dependent configurations all in under 60 seconds via USB Bridge Key. Select from pre-calibrated input ranges, scale outputs with ease, and program sophisticated setpoint functions for alarms, remote control, temperature control, or pump operations. Simulation Mode enables configuration testing without hardware, making it ideal for troubleshooting or pre-deployment planning. The Import/Export feature simplifies backups and cloning, while Configuration Certificates provide professional PDF summaries for easy sharing and record keeping. Whether you're a novice or expert, ToolBox delivers flexible, click-and-select options to streamline your wireless signal transmission, ensuring reliable and consistent setup. Download ToolBox from AutomationDirect.com.



Part No. [DEFINE-BRIDGE-KEY](#)



Part No. [DEFINE-BK-HM](#)

The BK-HM is a head-mount adapter cable from Define Instruments, for the DEFINE-BRIDGE-KEY USB programming cable. It enables connection to head-mounted transmitters TM-2HL and TM-2HLI for programming via the Define ToolBox software.



| Define Instruments Accessories    |                                                                                                                                                                                                                                       |                     |             |         |
|-----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|-------------|---------|
| Part No.                          | Description                                                                                                                                                                                                                           | Manufacturer Manual | Weight (lb) | Price   |
| <a href="#">DEFINE-BK-HM</a>      | Define Instruments head-mount adapter, for use with Define Instruments DEFINE-TM-2HL and DEFINE-TM-2HLI programmable temperature transmitters. Requires DEFINE-BRIDGE-KEY fob USB adapter.                                            | <a href="#">PDF</a> | 0.046 lb    | \$15.00 |
| <a href="#">DEFINE-BRIDGE-KEY</a> | Define Instruments fob USB adapter, for use with Define Instruments DEFINE-TWIN-LINK and DEFINE-REPEATER. (1) 2.3ft interface cable and (1) 3.2ft/1m USB extension cable included. Requires DEFINE-TOOLBOX-SW configuration software. | <a href="#">PDF</a> | 0.208 lb    | \$65.00 |

For additional information see [Manufacturer Manual links](#).