

TIENet® Interface Devices

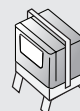
Teledyne ISCO Environmental Network—TIENet—interface devices enable a variety of sensors, samplers and measurement devices to communicate effectively with a Teledyne ISCO flow meter. All work with Teledyne ISCO technologies, while many also interface with devices from other companies. Either way, you get accurate results you can depend on.

TIENet™

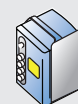
Teledyne ISCO Flow Meter Compatibility



Signature
(Hard wired)



Signature
Portable
(TIENet Plug)

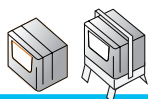


DuraTracker
(TIENet Plug)



DuraTracker Ex
(TIENet Plug)

TIENet® 304 Contact Output Card



The contact output card provides a contact closure that can be enabled based on conditions set in the equation builder. The Signature flow meter accepts up to three internal, user-installed TIENet option cards. The 304 contact output card provides two contact outputs per card for connection between the Signature flow meter and non-ISCO process control equipment that requires a contact output. It can be used for alarming or On/Off control.

Switching Mode:	Normally Open (NO), Normally Closed (NC) – User selectable
Maximum Load:	30 Volts, 1 Amp
Isolation:	Galvanic
Outputs per Card:	2

TIENet® 305 Rain Gauge and SDI-12 Input



TIENet 305 consists of a wall-mountable, isolated interface with a 1 meter cable that attaches to the DuraTracker. It interfaces rain gauge and SDI-12 devices to DuraTracker.

Rain Gauge Input: An ISCO 674 rain gauge or any make rain gauge can be connected to TIENet 305 to send rain data to DuraTracker.

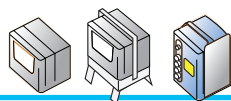
SDI-12 Input: SDI-12 device such as multiparameter sonde can be connected to TIENet 305 to send all parameters measured by SDI-12 device to DuraTracker. Up to 2 x SDI-12 devices can be connected to TIENet 305.

Rain Gauge and SDI-12 Input: Using a junction box, both rain and SDI-12 device can be connected to TIENet 305 to send measurement to DuraTracker.

When rain and/or SDI-12 devices are interfaced with DuraTracker using a TIENet 305, DuraTracker will record measurements from these devices along with measurements from other TIENet devices such as a flow sensor or pH interface.

Weight:	1.2 lbs.
Ambient Operating Temperature:	-40 °C to +60 °C (-40 °F to +140 °F)
Number of Rain Gauge Inputs:	1
Number of SDI-12 Inputs:	2
Connection Cable Length:	1 meter
Max Rated Drive Current:	530 mA

TIENet® 306 Sampler Interface



The TIENet 306 sampler interface connects the Signature flow meter and DuraTracker to a Teledyne ISCO wastewater sampler. Through this connection, the Signature and DuraTracker can enable the sampler based on user-specified conditions, pace the sampling routine based on flow volume, and receive sample and bottle information from the sampler. It is ideal for event based sampling. You can use the built-in equation builder on Signature and DuraTracker to create custom events.

Function:	Flow pacing, enabling based on triggered event. Time and bottle information sent to Signature flow meter
Powered by:	Signature Flow Meter
Operating temperature:	-20 to 50 °C (-4 to 122 °F)
Storage temperature:	-40 to 60 °C (-40 to 140 °F)
Pulse width:	50 ms
Pulse output:	5 volts
Sampler connection:	Standard: 6 pin connector for ISCO 6712, BLZZRD, GLS, and 3700 samplers For other options, contact factory

TIENet® 308 Analog Output Card



TIENet 308 allows for the output of recorded data via a 4–20 mA analog signal. The recorded data can be flow measurement from any of the TIENet flow sensors, data brought in from external devices via analog input, SDI-12 input, MODBUS input, rain gauge input, and contact input.

The Signature accepts up to three internal, user-installed TIENet option cards. The 308 analog output card provides two scalable 4–20 mA outputs per card for connection between the Signature meter and non-ISCO process control equipment or other equipment that accepts a 4–20 mA current signal.

Output range:	4–20 mA
Isolation:	Monolithic
Maximum load:	900 Ohm
Number of outputs per card:	2

TIENet® 307 Analog Input Card



TIENet 307 allows the Signature to record an analog signal from an external transmitter. Each input can be recorded as an individual data set. A wide choice of units are available to assign to this data set. The recorded readings can be used for event triggering and alarming. A Teledyne ISCO flow meter can use the recorded information from the transmitter in conjunction with other recorded data to make an intelligence decision without human intervention. The recorded data is also accessible from a remote location using communication options.

The Signature accepts up to three internal, user-installed TIENet option cards. The card provides two 4–20 mA inputs each for connection between the Signature flow meter and non-ISCO process control equipment or other equipment that outputs a two wire or four wire 4–20 mA signal.

Input range:	4–20 mA
Isolation:	Galvanic
Modes:	Configurable: Active or Passive Active: Signature flowmeter powering the current loop Passive: Signature flowmeter not powering the current loop
Output Voltage (in Active mode):	17 Vdc Minimum
Maximum Load (In Passive mode):	400 Ohms
Number of inputs per card:	2

Teledyne ISCO TIENet provide seamless integration of a variety of input/output interface options to the flow meter of your choice.

- TIENet input and output devices use a common, proprietary interface protocol.
- Low system integration cost with multiple measurement technologies, Input/Outputs, protocols and communication options.
- Configurable and upgradable without hardware or firmware changes.
- Quick set-up with an identifiable, unique address for each device.
- Easy troubleshooting with built in device diagnostics.

Teledyne ISCO

P.O. Box 82531, Lincoln, Nebraska 68501 USA
Toll-free: (800) 228-4373 • Phone: (402) 464-0231 • Fax: (402) 465-3091

teledyneisco.com



Teledyne ISCO is continually improving its products and reserves the right to change product specifications, replacement parts, schematics, and instructions without notice.

