



# DSCL, DSCP, SCTP

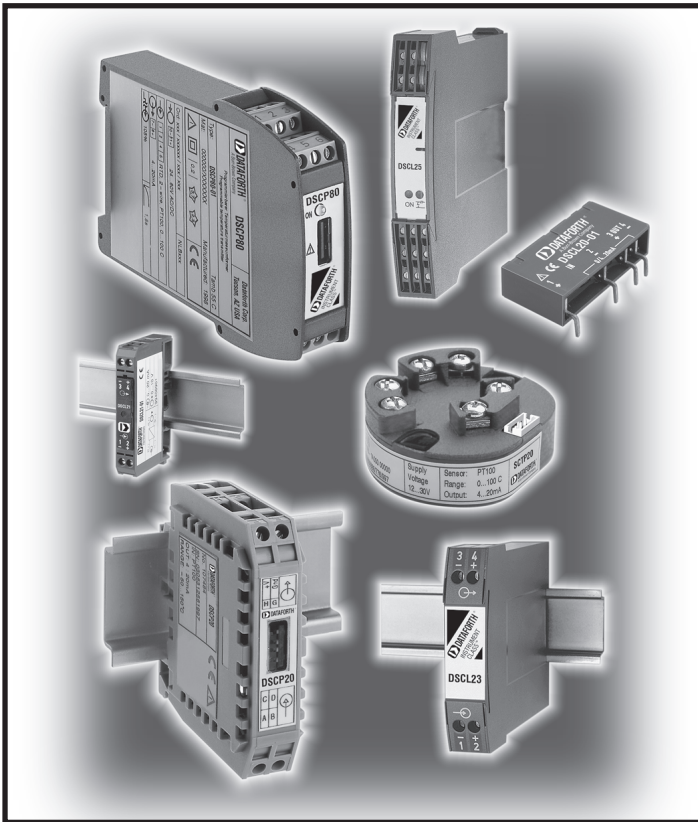
## Industrial Loop Isolators and Transmitters

### Description

Dataforth's new DSCL, DSCP, and SCTP series of products is a complete family of loop and universal AC/DC powered models of isolators and transmitters in component, DIN and head-mount packages. They include basic loop-powered isolators, wide-range AC/DC powered isolators and transmitters, and fixed-gain or hardware and software configurable models. Depending on the model, they accept a wide range of voltage, current, thermocouple, or RTD signals then filter, isolate, amplify, linearize, and convert these input signals to high-level analog outputs suitable for use in data acquisition, test and measurement, and control systems. They protect valuable measurement and control signals as well as connected equipment from the dangerous and degrading effects of noise, transient power surges, internal ground loops, and other hazards present in industrial environments.

### ► Features

- Full Family of Loop Isolators and Transmitters
- Signal Powered Passive Loop Isolator Models
- Wide Range 24 to 60V or 85 to 230V AC/DC Powered Models
- Jumper Configurable Models
- Software Configurable Models
- Isolation Protection up to 4000Vrms
- PCB, DIN Rail, Panel Mount, or Instrument Head Mounting
- Multiple Channels Per Package Available
- No Recalibration or Maintenance Required
- Fault Detection of Input Signal Available
- CE Compliant



**► Loop Isolators and Transmitters Selection Guide**

Characteristic	DSCL20	DSCL21	DSCL22	DSCL23	DSCL24	DSCL24
Channels per Module	1	1	1, 2, or 3	1, or 2	1	2
Functionality	Isolator	Isolator	Isolator	Isolator	Isolator	Isolator
Mechanical Format	Component	DIN	DIN	DIN	DIN	DIN
Isolation Voltage Type	500Vrms Signal & Pwr	500Vrms Signal & Pwr	4000Vrms (1 ch) Signal & Pwr	2300Vrms 3-Way	2300Vrms 3-Way	2300Vrms 3-Way
Input Range from field	0/4-20mA	0/4-20mA	0/4-20mA	4-20mA	Std/Jumper	Std/Factory
Output Range to System	0/4-20mA	mA or V	mA or V	4-20mA	Std/Jumper	Std/Factory
Output Split to 2 channels	—	—	Yes	Yes	—	Yes
Gain/Offset Adjust	—	—	—	—	±10%	±10%
Accuracy	<±0.1%	<±0.1%	<±0.1%	<±0.2%	<±0.2%	<±0.2%
Bandwidth	750Hz	750Hz	500Hz	200Hz	15Hz	15Hz
Load Range Current Voltage	0-600Ω —	0-600Ω >5MΩ	0-1000Ω >5MΩ	0-1000Ω —	0-600Ω >2KΩ	0-600Ω >2KΩ
Loop Power to Xmtr	—	—	—	24V (nom)	—	—
Power Supply	Passive	Passive	Passive	12-30VDC	Univ AC/DC Pwr	Univ AC/DC Pwr
Dimensions (h x w x d)	.8 x .4 x 1.6 in	2.9 x .5 x 1.9 in	see specs	see specs	4.7 x .7 x 5.7 in	4.7 x .7 x 5.7 in
Operating Temp Range	-20°C to +65°C	-20°C to +65°C	-25°C to +55°C	-25°C to +55°C	-25°C to +55°C	-25°C to +55°C
Wiring Interface	4 Pins	Screw Term	Screw Term	Screw Term	Screw Term	Screw Term
Mounting Option	pcb or socket	DIN	DIN/Panel	DIN/Panel	DIN/Panel	DIN/Panel

**► Configurable Transmitters Selection Guide**

Characteristic	SCTP20	DSCP20	DSCP81
Channels per Module	1	1	1
Functionality	Transmitter	Transmitter	Transmitter
Mechanical Format	Head	DIN	DIN
Isolation Voltage Type	Non/1500V Non/3-Way	Nonisolated —	2300Vrms 3-Way
Input Range from field	Configurable	Configurable	Configurable
Output Range to System	Configurable	Configurable	Configurable
Accuracy	<±0.2%	<±0.2%	<±0.2%
Bandwidth	Configurable	Configurable	Configurable
Load Range Current Voltage	0-900Ω —	0-900Ω —	0-600Ω >2KΩ
Power Supply	Loop Power	Loop Power	Univ AC/DC Pwr
Dimensions (h x w x d)	1.5dia x .66 in	2.4 x .7 x 2.7 in	2.7 x .7 x 4.5 in
Operating Temp Range	-25°C to 80°C	-25°C to 80°C	-25°C to +55°C
Wiring Interface	Screw Term	Screw Term	Screw Term
Mounting Option	Inst Head	DIN	DIN