SI-420

Serial to Analog converter



The Eagle Microsystems SI-420 converts serial data to an analog output allowing data transfer from serial devices to PLC's and other common analog devices. The device can function in either an passive loop powered or active configuration. The serial input is electrically isolated from the 4-20 mA loop, eliminating any possible ground loop issues between the remote serial device and the current loop.

System Features RS 232 or 20mA serial input 4-20 mA output. 16 bit D/A converter. Presets for many popular serial devices. 20 mA Serial Output. Pushbutton Scaling Self Diagnostics. Self generated Test Signal. Loop or 24v powered. DIN rail mountable enclosure.

いて

Your Source for Precision Process Solutions



Convert a serial data stream to an Isolated 4-20 mA signal

The SI-420 is a 35mm DIN mounted device that converts a number received over an RS232 or 20mA current-loop interface into a proportional 4-20mA output. The device will work in either a passive 24V loop-powered or active 9V to 28V powered configuration. The serial input is electrically isolated from the 4-20mA loop, thereby eliminating any possible ground-loop issues between the remote serial device and the current loop. This product is a great choice to use in low power environments such as hazardous areas or touch safe enclosures. It is also a great choice for retrofitting existing system as the loop powered setting offers an alternative to an independently powered device requiring additional wiring.





SPECIFICATIONS

DAC resolution	1 part in 65536 (16-bit)	Serial inputs	RS232 Rx or 20mA
Active current requirements	11mA + loop (4mA to 20mA)	Passive current requirements	4mA to 20mA (loop)
Active power supply	9 to 28VDC	Passive power supply	9V + burden resistor voltage at 20mA (0.02 X LOAD OHMS).
Active 4-20mA drive	Voltage of supply – 3V	Passive 4-20mA drive	Voltage of supply – 9V
Active mA range	0mA – 21mA	Passive mA range	3.8mA – 25mA
Linearity	0.025% or better	Monotonic	Full (100%)
Noise	<10mV @ 250ohm load	Temperature Range	-10C to 60C (0% condensation)
Minimum Load	0 ohms	Recommended Load	250 ohms
Full-scale number range (Decimal point is ignored)	100 to 2,000,000,000	Absolute Max Voltage	32VDC
Non-volatile storage	EEPROM, 3-sets w/ CRC integrity checking and auto-correcting is incorporated.	Maximum serial data size	32 including carriage- return (control-characters such as <stx> & <lf> are ignored.</lf></stx>

