

The Type 9541 is designed to accept up to eight analog signals in the range of 0/4mA to 20/24mA from either 2-, 3- or 4-wire transmitters located in Zone 0, 1 gas group IIC or a Class I, Division 1 or 2 hazardous area. All inputs are galvanically connected but voltage-free.

Each input is sampled independently and fed to an integrating A/D converter via an analog multiplexer. After conversion, the digital signal is fed to a microprocessor which prepares it for reading by the field station central unit (ZE). The scan rate for all eight inputs is user-selectable between 150ms, 270ms, or 540ms.

Application	2-, 3-, 4-wire 4/20mA transmitters
Number of inputs	8
Isolation	point to ZE point to ground

Input characteristics	
Range	0/4...20/24mA
Resistance	7 Ω
Scaling	linear, square root

System data	
Resolution	12 bit + sign
Update frequency	19ms per input
Basic error	< ± 0.05% FSR
Temperature effect	< ± 0.05% per 10K

External power, SVB	
Module	19V/17mA
Available power to field circuit	
SVB 9581/...-148	19V/27mA per input
SVB 9581/...-248	19V/40mA per input
SVB 9581/...-107	24V/367 Ω per input

Diagnostics	
open-circuit, short-circuit, over/under range, module failure	

