

Gageline PS100

Probe satellites for efficient industrial measurement data logging



The individual probe satellites of the Gageline PS series can be combined with one another as required and offer various connections.

For data processing work, the probe satellites are connected to a Gageline Vega or Sirius industrial measurement computer.

System features

- Maximum of 16 gauge heads per probe satellite
- Synchronization of measurement data logging (trigger, 500 KHz)
- Buffered logging without data loss
- Innovative and fast connecting system between probe satellites without cabling

Gageline PS100

Probe satellites for measurement data logging

High level of performance for dynamic measurements

- Precision measuring amplifier
- Integrated, dynamic and permanent memory
- Dynamic measurements with data rates of up to 500 KHz
- Time-synchronous recording of measured values ($\Delta t < 0.1 \text{ ms}$) for all connected probe satellites
- Sophisticated trigger functions (including pre-trigger and trend monitoring)

Rapid communication for flexible configurations

- 100-Mbps Ethernet connection between the satellite and the measuring computer
- Systems with up to 255 satellites possible
- Ethernet cable lengths of up to 100 m

Technical data

Ethernet	100-Mbps switch
Power supply	24 VDC $\pm 20 \%$
Protection class	IP54
Operating conditions	0 °C to +45 °C, max. 80 % relative humidity
Dimensions [W x D x H]	295 x 150 x 65 mm
Weight	2.2–2.7 kg (depending on model)

Connection-specific data

	PS100-16-LVDT	PS100-16-HBT	PS100-16-4/20	PS100-16-AV
Number of inputs	16	16	16	16
Type of inputs	full bridge	half bridge	voltage	voltage
Resolution	16 bit	16 bit	16 bit	16 bit
Measuring range	scalable	scalable	4–20 mA	$\pm 10 \text{ V}$
Sensitivity (mV)	150 mV/V/mm	73.75 mV/V/mm	-	-
Oscillator frequency	5 KHz	10 KHz	-	-
Probe supply voltage	3.2 V	3.2 V	-	-
MPE (at ambient temperature +20° C)	$\pm 0.1 \%$ from measuring range	$\pm 0.1 \%$ from measuring range	$\pm 0.1 \%$ from measuring range	$\pm 0.3 \%$ from measuring range
Trigger	500 KHz	500 KHz	500 KHz	500 KHz
	PS100-8-D	PS100-8-4/20-4-D	PS100-8-L-4-D	PS100-8-4/20-8-L
Number of inputs/outputs	8	8 + 4	8 + 4	8 + 8
Type of inputs/outputs	incremental	voltage + incremental	LVDT + incremental	LVDT + 4/20 mA
Resolution	32 bit counter	16 bit/32 bit	16 bit/32 bit	16 bit/n.a.
Measuring range	-	4–20 mA/-	scalable/-	scalable/-
Sensitivity (mV)	-	-	150 mV/V/mm/-	150 mV/V/mm/-
Oscillator frequency	-	-	5 KHz	5 KHz
Probe supply voltage	-	-	3.2 V	3.2 V
MPE (at ambient temperature +20° C)	-	$\pm 0.1 \%$ from measuring range	$\pm 0.1 \%$ from measuring range	$\pm 0.1 \%$ from measuring range
Trigger	1 MHz	500 KHz	500 KHz	500 KHz
	PS100-128-DIO/P	PS100-128-DIO/R		
Number of inputs/outputs	64/64	64/64		
Type of inputs/outputs	opto/PNP	opto/relay		
Output frequency	1 KHz	500 Hz		
Power supply/switching currents for digital outputs	4 A/0 – 500 mA (24 VDC $\pm 20 \%$)	4 A/0–500 mA (24 VDC $\pm 20 \%$)		

* short-circuit proof