# GRAPHTEC

Versatile Data Acquisition Unit **DATA PLATFORM GL7000** 

Module Selection Guide

#### **GL7000** features

- The GL7000 can be expanded to accommodate a wide variety of measurements. (Up to 10 modules can be attached to the main unit)
- Attaching the HD display module with a touch panel allows both stand-alone operation and embedding into a system.\*
- 2 interfaces to connect the GL7000 to your PC: USB 2.0, Ethernet. 4 destinations to save the recording data.
- (Built-in RAM, Built-in Flash memory, SD memory card, and SSD module)
- Includes software for high-performance and easy operation (GL-Connection)
  - \* HD display module sold separately



# Flexible amplifier module combination allows a wide range of measurments

#### Voltage Module GL7-V



Voltage 10ch/unit

MΔX 1kS/s sampling

Voltage measurement for sensor output and battery cell. (Displacement, Pressure, Wind speed, etc)

- 1kS/s Simultaneous sampling
- 10 channels / unit
- Maximum input voltage 100V

### Voltage/Temperature Module GL7-M



MΔX 100S/s

Measurement of internal temperature and working voltage of samples within an environmental test chamber.

- 10ms / 10ch High speed scan method
- 10 channels / unit
- Variety of input types (Voltage, Thermocouple, RTD)

#### High Speed Voltage Module GL7-HSV



High Speed

MAX 1MS/s Simultaneous sampling

Inverter measurement, Vibration Testing, Drop test

- 1MS/s High speed simultaneous sampling
- 4 channels / unit
- Maximum input voltage 100V

## High Voltage Module GL7-HV



Voltage 2ch/unit

MAX 1MS/s (1µs)

MAX Input Voltage1000V

Power supply line. Electric Vehicle battery, etc.

- High withstand voltage (Maximum input voltage: 1,000V)
- Maximum sampling speed 1MS/s
- Real-time RMS measurement

#### DC Strain Module GL7-DCB









MAX 100kS/s

Strain Gauge TEDS Sensor

Strain measurement with strain gauge or strain gauge transducer

- Built-in bridge amp enables direct connection to strain guages
- Excitation supply for bridge circuit (Constatnt voltage / Constant current)
- Supports TEDS sensors
- \*1 Conversion connector between DSUB and screw terminal: B-560 (Option) \*2 Conversion cable between DSUB and NDIS: B-561(Option)

### Charge Module GL7-CHA





Charge Voltage 100kS/s

Charge

Acceleration is measured with the general accelerometer which is typically used for vibration tests.

- Charge / IEPE / Voltage type sensor compatible
- The wide variety of filter functions allow high-precision measurements.
- Supports TEDS sensors

#### Voltage Output Module GL7-DCO

NEW

voltage

Recording data MAX 100kS/s Arbitrary

Test with arbitrary waveform for R&D and designing purposes Simulation for the experiment data

- 8 channels / unit
- Output voltage from recorded data
- Output data can be created by dedicated software Output voltage

## Logic/Pulse Module GL7-L/P

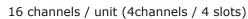


Pulse

MΔX 1MS/s

Simultaneous sampling

Measurement of timing, encoder output, rotation, and flow for controlled equipment



Logic: 1MS/s High speed sampling Pulse: 10kS/s High speed sampling



\*4 Probe set for Logic input: RIC-10 (Option)

\*3 SMA-BNC conversion cable : B-562 (Option)

Model numbe Number of inp Input method	ule Specifications er	Voltage GL7-V	High Speed Voltage GL7-HSV	
put method	put channels	10 channels All channels isolated unbalanced input,	4 channels All channels isolated unbalanced input,	
		Simultaneous sampling, Screw terminal (M3 screw)	Simultaneous sampling, BNC connector	
Sampling spe Built in RAM	ed (interval)	1 k Samples/s to 1 Sample/h (1ms to 1h) 2M samples	1 M Samples/s to 1 Sample/h (1µs to 1h)	
Measurement		100, 200, 500 mV,1, 2, 5, 10, 20, 50, 100	V, and 1-5 V/F.S.	
A/D Converte nput impeda		Successive Approximation type, 16 bits (effect 1 M $\Omega$ ± 5 %		
Maximum nput voltage	Between (+) / (-) terminal Between channels	100mV to 1V range: 60 V p-p, 2V to 100V 60 V p-p	range: 100 V p-p	
	Between channel / GND	60 V p-p		
Maximum voltage	Between channels  Between channel / GND	1000 V p-p (1 minute) 1000 V p-p (1 minute)		
	Between input / GND	Min. 50 MΩ (at 500 V DC)	M 000 0)	
requency re	de rejection ratio sponse	Min. 90 dB (50/60 Hz, Signal source impe DC to 1 k Hz (at +1/-3 dB)	dance: Max. 300 Ω) DC to 200 k Hz (at +1/-3 dB)	
ilter (Low pa	iss)	Off,Line(1.5Hz),5,50,500 Hz(at -3dB 6dB/oct)	Off,Line(1.5Hz),5,50,500,5k,50k Hz (at -3dB 6dB/o	
Veight	nsions (W×D×H)	Approx. 49.2 x 136 x 160 mm (Excluding Approx. 840 g	Approx. 740 g	
/oltage/Temp	perature Module	Specifications	-	
	put channels	10 channels		
nput method Sampling spe		All channels isolated balanced input, Scans channels for sampling, Screw terminal (M3 screw 100 Samples/s at 1-10ch to 1 Sample/h (10 ms with 1-10ch to 1 hr. interval)		
Built-in RAM		2M samples		
Measurement ange	Voltage Temperature	20, 50, 100, 200, 500 mV, 1, 2, 5, 10, 20, Thermocouple: K. J. E. T. R. S. B. N. and W (WF	50 V, and 1-5 V/F.S. Re5-26),RTD: Pt100, JPt100 (JIS), Pt1000 (IEC75	
_	Humidity *1	0 to 100 % (using scaling function in 1V r		
R.J. Compens  VD Converte		Select internal or external Sigma-Delta type, 16 bits (effective resolu	ution: 1/40000 of measuring full range)	
nput impeda	nce	1 MΩ ± 5 %		
oltage	Between(+)/(-)terminal Between channels	60 V p-p 60 V p-p		
Maximum	Between channel / GND Between channels	60 V p-p		
oltage	Between channel / GND	350 V p-p (1 minute) 350 V p-p (1 minute)		
solation resistance	Between input / GND	Min. 50 MΩ (at 500 V DC)	edance: Max 300 O)	
Common-mode rejection ratio Filter		Min. 90 dB (50/60 Hz, Signal source impedance: Max. 300 Ω) Off, 2, 5, 10, 20, 40 (Moving average in selected number.		
		When the sample is longer than 5 second (5 seconds) will be used for creating the		
V output		Driving the humidity sensor B-530, 1 cha	nnel	
external dimer Veight	nsions (W×D×H)	Approx. 49.2 x 136 x 160 mm (Excluding Approx. 770 g	projections)	
ligh Voltage	Module Specifica	ations		
Model numbe Number of inc	put channels	GL7-HV 2 channels		
nput connect	tor	Isolated BNC connector	S It	
nput Method Sampling spe		All channels isolated unbalanced input, S 1MS/s (1μs)~1h	simultaneous sampling	
Built-in RAM nput coupling		2M samples AC, DC, AC-RMS, DC-RMS		
/leasurement	DC/AC	2 • 5 • 10 • 20 • 50 • 100 • 200 • 500 • 10		
ange	DC-RMS/AC-RMS	1 • 2 • 5 • 10 • 20 • 50 • 100 • 200 • 500\ Crest Factor: 1~200Vrms (C.F4) 500Vrn		
A/D Converto	r	Successive Approximation type, 16bits		
		Effective Resolution: AC, DC coupling 1/4 AC-RMS, DC-RMS coupling 1/20000 of m		
nput impeda		1MΩ±5%	icasaring rail range	
	Between (+)/(-) terminal	1kΩ or Less 1000Vp-p		
oltage	Between channels	300VACrms		
Maximum	Between channel / GND Between channels	300VACrms 2300VACrms (1 minute)		
oltage/	Between channel / GND	2300VACrms (1 minute)		
	Between input / GND de rejection ratio	Min. 50 MΩ (at 500 V DC) Min. 90 dB (50/60 Hz, Signal source impe	edance: Max. 300 Ω)	
requency Re		DC Coupling: DC~200kHz(+1/-3dB) AC Coupling: 4Hz~200kHz(+1/-4.5dB)		
ilter		OFF • Line (1.5Hz), 5Hz, 50Hz, 500Hz, 5	kHz, 50kHz (at -3dB/6dB oct)	
External dimer Veight	nsion (W x D x H)	Approx. 49.2 x 136 x 160mm (Excluding projections)		
	odule Specificatio	Approx. 740 g ns		
Model numbe		GL7-DCB 4 channels		
	tor	D-SUB 9pins (Female) STD accessories :	D-SUB 9pin (Male) x 4pieces	
nput connect		0.00.00.00.00.00.00.00.00.00.00.00.00.0		
nput connect		Optional accessory: Wiring converter (D	-SUB/Universal connector)	
nput connect nput method Sampling spe		All channels isolated balanced input, Sim 100kS/s(10µs)∼1h	SUB/Universal connector) ultaneous sampling	
nput connect nput method Sampling spe Built in RAM		All channels isolated balanced input, Sim 100kS/s(10µs)~1h 2M samples	ultaneous sampling	
nput connect nput method Sampling spe Built in RAM nput type Measurement		All channels isolated balanced input, Sim 100kS/s(10µs)~1h 2M samples DC Voltage, Strain, Resistance (Potentior 500 • 1000 • 2000 • 5000 • 10000 • 2000	ultaneous sampling netric)	
nput connect nput method Sampling spe Built in RAM nput type Measurement	Strain	All channels isolated balanced input, Sim 100kS/s(10µs)~1h 2M samples DC Voltage, Strain, Resistance (Potentior 500 • 1000 • 2000 • 5000 • 10000 • 2	ultaneous sampling netric) 0 <sub> <b>E</b></sub> ( <sub><b>F</b></sub> : 10 <sup>®</sup> Strain)	
nput connect nput method Sampling spe Built in RAM nput type Measurement ange	Strain  DC Voltage Resistance	All channels isolated balanced input, Sim 100kS/s(10µs)~1h 2M samples DC Voltage, Strain, Resistance (Potentior 500 · 1000 · 2000 · 5000 · 10000 · 2000 · 5000 · 10000 · 2000 · 5000 · 100000 · 2000 · 5000 · 100 · 200 · 5000 · 2000 · 2000 · 2	ultaneous sampling  netric)  0με (με : 10 <sup>-6</sup> Strain)  nV, 1 • 2 • 5V  ), 1 • 2 • 5 • 10 • 20 • 50kΩ	
nput connect nput method Sampling spe Built in RAM nput type Measurement ange  A/D Converte Gauge Ratio	Strain  DC Voltage Resistance	All channels isolated balanced input, Sim 100kS/sf (10µs)~1h 2M samples DC Voltage, Strain, Resistance (Potention 500 - 1000 - 2000 - 5000 - 10000 - 2000 0.25 - 0.5 - 1.0 - 2.5 - 5.0 - 10.0mWV 1 - 2 - 5 - 10 - 20 - 50 - 100 - 200 - 500	ultaneous sampling  netric)  0με (με : 10 <sup>-6</sup> Strain)  nV, 1 • 2 • 5V  ), 1 • 2 • 5 • 10 • 20 • 50kΩ	
nput connect nput method Sampling spe Built in RAM nput type Measurement ange  A/D Converte Gauge Ratio Compatible	Strain  DC Voltage Resistance	All channels isolated balanced input, Sim 20Ns/S(10µs)~1h 2M samples DC Voltage, Strain, Resistance (Potentior 500 · 1000 · 2000 · 5000 · 10000 · 2000 · 5000 · 10000 · 2000 · 5000 · 10000 · 2000 · 5000 · 10000 · 2000 · 5000 · 10000 · 2000 · 5000 · 100000000000000000000000000	ultaneous sampling  netric)  0με (με : 10 <sup>4</sup> Strain)  nV, 1 · 2 · 5V  2, 1 · 2 · 5 · 10 · 20 · 50kΩ  ive Resolution: 1/40000 of measuring full range	
nput connect nput method Sampling spe Built in RAM nput type Measurement ange  A/D Converte Gauge Ratio Compatible	Strain  DC Voltage Resistance	All channels isolated balanced input, Sim 100k5(sf 10ps) ~1h 2M samples DC Voltage, Strain, Resistance (Potentior 500 · 1000 · 2000 · 5000 · 10000 · 2000 · 5500 · 100 · 2000 · 5000 · 12 · 2 · 5 · 10 · 20 · 50 · 10 · 200 · 5000 · 1 · 2 · 5 · 10 · 20 · 50 · 100 · 200 · 5000 Successive Approximation type, 16 bits Effec 2.0 constant [Strain Gauge] 2 · 0r 3 · 0r 4 · 0r 5 · wire palf bridge (4 · 0r 5 · wire	ultaneous sampling  netric)  0,ε (με: 10.6 Strain)  nV, 1 * 2 * 5V  2, 1 * 2 * 5 * 10 * 20 * 50kΩ  vire Resolution: 1/40000 of measuring full rang  vire: Remote sensing)  Remote sensing)	
nput connect nput method Sampling spe Built in RAM nput type Measurement ange  V/D Converte Sauge Ratio Compatible	Strain  DC Voltage Resistance	All channels isolated balanced input, Sim 100kS/s(10)s)~1h 2M samples DC Voltage, Strain, Resistance (Potentior 500 • 1000 • 2000 • 5000 • 10000 • 2000 0.25 • 0.5 • 1.0 • 2.5 • 5.0 • 10.0mV/V 1 • 2 • 5 • 10 • 20 • 55 • 100 • 200 • 5000 1 • 2 • 5 • 10 • 20 • 50 • 100 • 200 • 5000 28 cucessive Approximation type, 16 bits Effect 2.0 constant [Strain Gauge] 2 • or 3 • or 4-wire quarter bridge (3 • or 4-v3 • or 5-wire half bridge (4 • or 5-wire 10 bridge (6 • or 5-wire 2 • or 6-wire full bridge (6 • or 5-wire 2 • or 6-wire full bridge (6 • or 5-wire 3 • or 4 • or 6-wire full bridge (6 • or 5-wire 7 • or 5-wire 5 • or 5 • or 6-wire 10 bridge (6 • or 5-wire 6 • or 6-wire full bridge (6 • or 6-wire 10 bridge (6 • or 6-	ultaneous sampling  netric)  0 ε (ε : 10 ° Strain)  nV, 1 · 2 · 5V  ), 1 · 2 · 5 · 10 · 20 · 50kΩ  vive Resolution: 1/40000 of measuring full range  vire: Remote sensing)  Remote sensing)  nsing)	
nput connect mput method sampling spe sault in RAM nput type Measurement ange  VD Converte Gauge Ratio Compatible Sensor	Strain  DC Voltage Resistance  Strain*2  Resistance	All channels isolated balanced input, Sim 100kS/s(10us)~1h 2M samples DC Voltage, Strain, Resistance (Potentior 500 • 1000 • 2000 • 5000 • 10000 • 2000 0.25 • 0.5 • 1.0 • 2.5 • 5.0 • 10.0 mV/V 1 • 2 • 5 • 10 • 20 • 55 • 100 • 200 • 5000 1 • 2 • 5 • 100 • 200 • 5000 1 • 2 • 5 • 100 • 200 • 5000 5000 5000 5000 5000 5000	ultaneous sampling  netric)  0 ε (ε : 10 ° Strain)  nV, 1 · 2 · 5V  ), 1 · 2 · 5 · 10 · 20 · 50kΩ  vive Resolution: 1/40000 of measuring full range  vire: Remote sensing)  Remote sensing)  nsing)	
nput connect nput method sampling spe Suilt in RAM nput type deasurement ange  VD Converte Sauge Ratio Compatible Sensor	Strain  DC Voltage Resistance  r  Strain*2  Resistance  Resistance	All channels isolated balanced input, Sim 100k3/s(10)s)~1h 2M samples DC Voltage, Strain, Resistance (Potentior 500 - 1000 - 2000 - 5000 - 10000 - 2000 0.25 - 0.5 - 1.0 - 2.5 - 5.0 - 10.0mV/V 1 - 2 - 5 - 10 - 20 - 5.0 - 10.0mV/V 1 - 2 - 5 - 10 - 20 - 5.0 - 10.0mV/V 1 - 2 - 5 - 10 - 20 - 5.0 - 100 - 200 - 5000 Successive Approximation type, 16 bits Effec 2.0 constant [Strain Gauge] 2 - or 3 - or 4-wire quarter bridge (3 - or 4-v 3 - or 4 - or 5-wire half bridge (4 - or 5-wire tull bridge (6-wire: Remote se 4-wire full bridge with constant current ex Potentiometric, Resistance 5010k(7)	ultaneous sampling  netric)  0 ε (ε : 10 ° Strain)  nV, 1 · 2 · 5V  ), 1 · 2 · 5 · 10 · 20 · 50kΩ  vive Resolution: 1/40000 of measuring full range  vire: Remote sensing)  Remote sensing)  nsing)	
nput connect nput method tampling spe tampling tampl	Strain  DC Voltage Resistance  Strain*2  Resistance  resistance  ance ance ance ance ance ange	All channels isolated balanced input, Sim 100k3/s(10)s)~1h 2M samples DC Voltage, Strain, Resistance (Potentior 500 · 1000 · 2000 · 5000 · 10000 · 2000 0.25 · 0.5 · 1.0 · 2.5 · 5.0 · 10.0mV/V 1 · 2 · 5 · 10 · 20 · 5.0 · 10.0mV/V 1 · 2 · 5 · 10 · 20 · 5.0 · 100 · 2000 · 5000 successive Approximation type, 16 bits Effec 2.0 constant [Strain Gauge] 2. or 3 · or 4-wire quarter bridge (3 · or 4-v 3 · or 4 · or 5-wire half bridge (4 · or 5-wire full bridge (6 · or 8-v 4 · or 6-wire full bridge (6 · or 8-v 5 · or 8-vire staft bridge (7 · or 8-v 6 · or 8-vire full bridge (8 · or 8-v 7 · or 8-vire full bridge (8 · or 8-v 7 · or 8-vire full bridge (8 · or 8-v 7 · or 8-vire full bridge (8 · or 8-v 7 · or 8-vire full bridge (8 · or 8-v 7 · or 8-vire full bridge (8 · or 8-v 7 · or 8-vire full bridge (8 · or 8-v 7 · or 8-vire full bridge (8 · or 8-v 7 · or 8-vire full bridge (8 · or 8-v 7 · or 8-vire full bridge (8 · or 8-v 7 · or 8-vire full bridge (8 · or 8-v 7 · or 8-vire full bridge (8 · or 8-v 7 · or 8-vire full bridge (8 · or 8-v 7 · or 8-vire full bridge (8 · or 8-v 7 · or 8-vire full bridge (8 · or 8-v 7 · or 8-vire full bridge (8 · or 8-v 7 · or 8-vire full bridge (8 · or 8-v 7 · or 8-vire full bridge (8 · or 8-v 7 · or 8-vire full bridge (8 · or 8-v 7 · or 8-v	ultaneous sampling  netric)  0 ε (ε : 10 ° Strain)  nV, 1 · 2 · 5V  ), 1 · 2 · 5 · 10 · 20 · 50kΩ  vive Resolution: 1/40000 of measuring full range  vire: Remote sensing)  Remote sensing)  nsing)	
nput connect nput method sampling spe suiti it n RAM nput type deasurement ange  VD Converte bauge Ratio Compatible densor services of the ser	Strain DC Voltage Resistance r Strain*2 Resistance ance tor*3 lage Current	All channels isolated balanced input, Sim 100k/Syf (10µs)~1h 2M samples DC Voltage, Strain, Resistance (Potentior 500 · 1000 · 2000 · 5000 · 10000 · 2000 ·	ultaneous sampling  netric)  0 ε (ε : 10 ° Strain)  nV, 1 · 2 · 5V  ), 1 · 2 · 5 · 10 · 20 · 50kΩ  vive Resolution: 1/40000 of measuring full range  vire: Remote sensing)  Remote sensing)  nsing)	
nput connect nput method armpling spe uillit in RAM nput type deasurement ange  VD Converte sauge Ratio compatible densor  seridge resista nternal Resis excitation voli onslant current ridge excitation onslant current ridge excitation	Strain  DC Voltage Resistance r  Strain*2  Strain*2  Resistance ance ance ctor*3 tage Current Complance Voltage Method	All channels isolated balanced input, Sim 100k3/st (10)s/>-1h 2M samples DC Voltage, Strain, Resistance (Potentior 500 - 1000 - 2000 - 5000 - 10000 - 2000 0.25 - 0.5 - 1.0 - 2.5 - 5.0 - 10.0mV/V 1 - 2 - 5 - 10 - 2.0 - 5.0 - 10.0mV/V 1 - 2 - 5 - 10 - 2.0 - 5.0 - 10.0 - 200 - 5000 Successive Approximation type, 16 bits Effect 2.0 constant [Strain Gauge] 2 - or 3 - or 4-wire quarter bridge (3 - or 4-v) 3 - or 4 - or 5-wire half bridge (4 - or 5-wire 4-or 6-wire full bridge (6-wire: Remote se 4-wire full bridge with constant current ex Potentiometric, Resistance 50~10k0 Quarter, half bridge: 1200/3500 DC1 - 2 - 2.5 - 5 - 10V 0.1~20ma 10V	ultaneous sampling  netric)  0 ε (ε : 10 ° Strain)  nV, 1 • 2 • 5V  2, 1 • 2 • 5 • 10 • 20 • 50kΩ  vive Resolution: 1/40000 of measuring full range  vire: Remote sensing)  Remote sensing)  Remote sensing)  citation	
aput method sampling spe guilt in RAM input type fleasurement ange with the sampling spe guilt in RAM input type fleasurement ange with the sample RAM input type fleasurement ange with the sample RAM input type fleasurement fl	Strain  DC Voltage Resistance r  Strain*2  Resistance anor*3 tage Current Current Compliance Voltage Method Max. Range	All channels isolated balanced input, Sim 100kS/s(10us)~1h 2M samples DC Voltage, Strain, Resistance (Potentior 500 · 1000 · 2000 · 5000 · 10000 · 2000 0.25 · 0.5 · 1.0 · 2.5 · 5.0 · 10.0 m/V 1·2·5·10·20·50·100 · 2000 · 5000 1·2·5·10·20·50·100 · 2000 · 5000 1·2·5·10·20·50·100 · 2000 · 5000 1·2·5·10·20·50·100 · 2000 · 5000 1·2·5·10·20·50·100 · 2000 · 5000 1·2·5·10·20·50·100 · 2000 · 5000 1·2·2·5·10·20·50·100 · 2000 · 5000 1·2·2·5·10·20·50·100 · 2000 · 5000 1·2·2·5·10·20·50·100 · 2000 · 5000 1·2·2·0·10·10·10·10·10·10·10·10·10·10·10·10·1	ultaneous sampling  netric)  Ope (p: 10 <sup>4</sup> Strain)  nV, 1 • 2 • 5V  1, 1 • 2 • 5 • 10 • 20 • 50kΩ  rive Resolution: 1/40000 of measuring full range  vire: Remote sensing)  Remote sensing)  citation  g the condition menu)	
nput connect pput method sampling spe suilt in RAM nput type deasurement ange  AVD Converte sauge Ratio Compatible Sensor  Seridge resists internal Resis Excitation vol forestant uner tidge excitation vol forestant uner Cero Adjust volani gauge demote sensis frame consensurement	Strain  DC Voltage Resistance r  Strain*2  Strain*2  Resistance ance tor*3 tage Current Current Compliance Voltage Method Max. Range ing	All channels isolated balanced input, Sim 100ks/sr(10us)~r1h 2M samples DC Voltage, Strain, Resistance (Potentior 500 · 1000 · 2000 · 5000 · 10000 · 2000 0.25 · 0.5 · 1.0 · 2.5 · 5.0 · 10.0 mV/V 1 · 2 · 5 · 10 · 2 · 5 · 5.0 · 10.0 mV/V 1 · 2 · 5 · 10 · 20 · 50 · 100 · 2000 · 5000 1 · 2 · 5 · 100 · 200 · 5000 1 · 2 · 5 · 100 · 200 · 5000 1 · 2 · 5 · 100 · 200 · 5000 5000 5000 5000 5000 5000	ultaneous sampling  netric)  0	
nput connect nput method Sampling spe Sullit in RAM nput type Measurement ange  AD Converte Sauge Ratio Compatible Sensor  Bridge resiste nternal Resis Excitation voll Constant curent fridge excitation Cero Adjust or Strain gauge Remote sensis Shunt Calibra Maximum	Strain  DC Voltage Resistance  r  Strain*2  Strain*2  Resistance ance ance corplance duge  Current Complance Voltage  Method  Max. Range ing  titlon  Between (+)(-)  -> ming  titlon	All channels isolated balanced input, Sim Tolks(s)(10)s)~1h 2M samples DC Voltage, Strain, Resistance (Potentior 500 · 1000 · 2000 · 5000 · 10000 · 2000 0.25 · 0.5 · 1.0 · 2.5 · 5.0 · 10.0mV/V 1 · 2 · 5 · 10 · 20 · 55 · 100 · 200 · 5000 1 · 2 · 5 · 10 · 20 · 55 · 100 · 200 · 5000 1 · 2 · 5 · 10 · 20 · 55 · 100 · 200 · 5000 2 · 2 · 5 · 10 · 20 · 50 · 100 · 200 · 5000 2 · 2 · 5 · 10 · 20 · 50 · 100 · 200 · 5000 2 · 2 · 5 · 10 · 20 · 50 · 100 · 200 · 5000 2 · 2 · 5 · 10 · 20 · 50 · 100 · 200 · 5000 2 · 2 · 5 · 0 · 4-wire quarter bridge (3- or 4-v 3 · or 4 · or 5-wire half bridge (4- or 5-wire 4- or 6-wire full bridge (6- or 5-wire 4- or 6-wire full bridge (7- or 5-wire 1000) 2 · 2 · 2 · 5 · 5 · 10V 2 · 2 · 2 · 5 · 10V 2 · 2 · 2 · 5 · 10V 3 · 2 · 2 · 3 · 3 · 3 · 3 · 3 · 3 · 3 ·	ultaneous sampling  netric)  0	
nput connect nput method Sampling spe Suilit in RAM nput type Measurement ange  VID Converte Sauge Ratio Compatible Sensor  Bridge resista nternal Resis Excitation voli Constant curent intige excitation For Adjust or Strain gauge Remote sensis shunt Calibra Raximum	Strain  DC Voltage Resistance  r  Resistance ance ance ance Current Compliance Voltage Method Max. Range ing ditton Gemen-mode voltage Edwen (+) / (-) leminal Common-mode voltage Between channels Between channels	All channels isolated balanced input, Sim Tolks(s)(10)s)~1h 2M samples DC Voltage, Strain, Resistance (Potentior Soo - 1000 - 2000 - 5000 - 10000 - 2000 0.25 - 0.5 - 1.0 - 2.5 - 5.0 - 10.0mV/V 1 - 2 - 5 - 10 - 20 - 5.0 - 10.0mV/V 1 - 2 - 5 - 10 - 20 - 5.0 - 10.0mV/V 1 - 2 - 5 - 10 - 20 - 5.0 - 10.0mV/V 1 - 2 - 5 - 10 - 20 - 5.0 - 10.0mV/V 2 - 5 - 10 - 20 - 5.0 - 10.0 - 200 - 5.000 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 -	uttaneous sampling  netric)  0	
nput connect nput method Sampling spe Suillt in RAM nput type Measurement ange  VD Converte Jauge Ratio Compatible Sensor  Bridge resistanternal Resis Excitation volid Constant current ridge excitation Control	Strain  DC Voltage Resistance r  Strain*2  Strain*2  Strain*2  Strain*2  Gurrent Complance Voltage Method Max. Range ing tition Stelleen (1)/(-) Emmina Common-mode voltage Between channels Between channels Between channels	All channels isolated balanced input, Sim 100ks/sr(10µs)~1h 2M samples DC Voltage, Strain, Resistance (Potentior 500 · 1000 · 2000 · 5000 · 10000 · 2000 ·	ultaneous sampling  netric)  0	
nput connect nput method Sampling spe Suilit in RAM nput type Reasurement ange  VID Converte Sauge Ratio Compatible Sensor  Bridge resiste nternal Resis Excitation volt Constant curent intige excitation Cero Adjust Valtage  Valt	Strain  DC Voltage Resistance  r  Strain*2  Strain*2  Strain*2  Gurrent  Compliance Voltage  Method  Max. Range  ing  tion  Between (+)(+) teminal  Common-mode voltage  Between channel (RM)	All channels isolated balanced input, Sim folks/s(10)s)~1h 2M samples DC Voltage, Strain, Resistance (Potentior 500 - 1000 - 2000 - 5000 - 10000 - 2000 0.25 - 0.5 - 1.0 - 2.5 - 5.0 - 10.0mV/V 1 - 2 - 5 - 10 - 20 - 5.0 - 10.0mV/V 1 - 2 - 5 - 10 - 20 - 5.0 - 10.0mV/V 1 - 2 - 5 - 10 - 20 - 5.0 - 100 - 200 - 5000 1 - 2 - 5 - 10 - 20 - 5.0 - 100 - 200 - 5000 2 - 2 - 5 - 10 - 20 - 5.0 - 100 - 200 - 5000 2 - 2 - 5 - 10 - 20 - 5.0 - 100 - 200 - 5000 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 -	ultaneous sampling  netric)  0 ε (ε : 10 ° Strain)  nV, 1 • 2 • 5V  0, 1 • 2 • 5 • 10 • 20 • 50kΩ  ive Resolution: 1/40000 of measuring full range  vire: Remote sensing)  Remote sensing)  sensing)  citation  g the condition menu)  of bridge6-wire full bridge  skΩ (350Ω gauge)	
nput connect nput method sampling speg Saulit in RAM nput type deasurement ange  A/D Converte Sauge Ratio Compatible Sensor  Saridge resists internal Resis Excitation volic Sorsiant current bridge excitation volic Gron Adjust or Strain gauge Remote sensis Shunt Calibra Maximum nput Voltade With stand voltage soldation resistance Common-mode	Strain  DC Voltage Resistance  r  Resistance  ance  ance  ance  ance  ance  ance  corrent  Compliance Voltage  Method  Max. Range  ing  and  down-rande voltage  Between channel (SN)	All channels isolated balanced input, Sim 100ks/sr(10us)~r1h 2M samples DC Voltage, Strain, Resistance (Potentior 500 · 1000 · 2000 · 5000 · 5000 · 10000 · 2000 0.25 · 0.5 · 1.0 · 2.5 · 5.0 · 10.0 mV/V 1 · 2 · 5 · 10 · 20 · 55 · 100 · 200 · 5000 1 · 2 · 2 · 5 · 100 · 200 · 5000 1 · 2 · 5 · 50 · 100 · 2000 · 5000 1 · 2 · 5 · 10 · 20 · 5 · 50 · 100 · 200 · 5000 5000 5000 5000 5000 5000	ultaneous sampling  netric)  0 ε (ε : 10 ° Strain)  nV, 1 • 2 • 5V  0, 1 • 2 • 5 • 10 • 20 • 50kΩ  ive Resolution: 1/40000 of measuring full range  vire: Remote sensing)  Remote sensing)  sensing)  citation  g the condition menu)  of bridge6-wire full bridge  skΩ (350Ω gauge)	
nput connect nput method Sampling spe Sullit in RAM nput type Measurement ange  AD Converte Sauge Ratio Compatible Sensor  Bridge resiste nternal Resis Excitation voll Grossant curent fridge excitation Cerro Adjust or Strain gauge Remote sensis shunt Calibra Maximum nput Voltage With-stand voltage soldation resistance Common-more Common-more Cerequency Re	Strain  DC Voltage Resistance r  Strain*2  Strain*2  Strain*2  Resistance and tor*3  tage Current Compliance Voltage Method Max. Range ing titton (h)/(r) leminal Cemnon-mode voltage Between channel (SND Between channel	All channels isolated balanced input, Sim 100ks/sr(10us)~r1h 2M samples DC Voltage, Strain, Resistance (Potentior 500 · 1000 · 2000 · 5000 · 5000 · 10000 · 2000 0.25 · 0.5 · 1.0 · 2.5 · 5.0 · 10.0 mV/V 1 · 2 · 5 · 10 · 20 · 55 · 100 · 200 · 5000 1 · 2 · 5 · 50 · 100 · 2000 · 5000 1 · 2 · 5 · 50 · 100 · 2000 · 5000 1 · 2 · 5 · 10 · 20 · 5 · 50 · 100 · 2000 · 5000 1 · 2 · 5 · 10 · 20 · 5 · 100 · 200 · 5000 5000 5000 5000 5000 5000	ultaneous sampling  netric)  Op (μ: 10 <sup>4</sup> Strain)  nV, 1 • 2 • 5V  1, 1 • 2 • 5 • 10 • 20 • 50kΩ  rive Resolution: 1/40000 of measuring full rang  vire: Remote sensing)  Remote sensing)  setimate sensing)  citation  g the condition menu)  of bridge6-wire full bridge  skΩ (350Ω gauge)	
nput conect nput method Sampling spe Suilit in RAM nput type Measurement lange  A/D Converte Sauge Ratio Compatible Sensor  Bridge resiste nternal Resis Excitation volt Constant curent fixing excitation Cero Adjust of Stain gauge Remote sensis Shunt Calibra Maximum nput Voltage  Win-stand voltage soldition resistance	Strain  DC Voltage Resistance  r  Resistance ance ance ance ance complance Voltage Method Max. Range ing tition Resident (N)(r) leminal common-mode voltage Method Max. Range ing tition Between charme / GNO Between charm	All channels isolated balanced input, Sim Tolks(St (10s)>11h  2M samples DC Voltage, Strain, Resistance (Potentior Soo - 1000 - 2000 - 5000 - 10000 - 2000 0.25 - 0.5 - 1.0 - 2.5 - 5.0 - 10.0m/V/ 1 - 2 - 5 - 10 - 20 - 5.0 - 10.0m/V/ 1 - 2 - 5 - 10 - 20 - 5.0 - 10.0m/V/ 1 - 2 - 5 - 10 - 20 - 5.0 - 10.0 - 200 - 5000 8 Successive Approximation type, 16 bits Effect 2.0 constant [Strain Gauge] 2 - or 3 - or 4-wire quarter bridge (3 - or 4-v3 - 3 - or 4 - or 5-wire half bridge (4 - or 5-wire full bridge (4 - or 5-wire full bridge (5 - or 4 - or 5-wire half bridge) 2 - or 3 - or 4-wire quarter bridge (4 - or 5-wire full bridge (4 - or 5-wire full bridge (5 - or 4 - or 5-wire half bridge) 2 - or 3 - or 4-wire quarter bridge (4 - or 5-wire full bridge) 10 - 10 - 10 - 10 - 10 - 10 - 10 - 10 -	ultaneous sampling  netric)  Op (μ: 10 <sup>4</sup> Strain)  nV, 1 • 2 • 5V  1, 1 • 2 • 5 • 10 • 20 • 50kΩ  rive Resolution: 1/40000 of measuring full rang  vire: Remote sensing)  Remote sensing)  setimate sensing)  citation  g the condition menu)  of bridge6-wire full bridge  skΩ (350Ω gauge)	
nput connect nput method Sampling spe Sullit in RAM nput type Measurement ange  AD Converte Sauge Ratio Compatible Sensor  Bridge resiste nternal Resis Excitation voll Grossant curent fridge excitation Cerro Adjust or Strain gauge Remote sensis shunt Calibra Maximum nput Voltage With-stand voltage soldation resistance Common-more Common-more Cerequency Re	Strain  DC Voltage Resistance  r  Resistance  ance  ance  ance  ance  ance  ance  corrent  Compliance Voltage  Method  Max. Range  ing  and  down-rande voltage  Between channel (SN)	All channels isolated balanced input, Sim 100ks/sr(10us)~r1h 2M samples DC Voltage, Strain, Resistance (Potentior 500 · 1000 · 2000 · 5000 · 5000 · 10000 · 2000 0.25 · 0.5 · 1.0 · 2.5 · 5.0 · 10.0 mV/V 1 · 2 · 5 · 10 · 20 · 55 · 100 · 200 · 5000 1 · 2 · 5 · 50 · 100 · 2000 · 5000 1 · 2 · 5 · 50 · 100 · 2000 · 5000 1 · 2 · 5 · 10 · 20 · 5 · 50 · 100 · 2000 · 5000 1 · 2 · 5 · 10 · 20 · 5 · 100 · 200 · 5000 5000 5000 5000 5000 5000	ultaneous sampling  netric)  Op (μ: 10 <sup>4</sup> Strain)  nV, 1 • 2 • 5V  1, 1 • 2 • 5 • 10 • 20 • 50kΩ  rive Resolution: 1/40000 of measuring full rang  vire: Remote sensing)  Remote sensing)  setimate sensing)  citation  g the condition menu)  of bridge6-wire full bridge  skΩ (350Ω gauge)	

Model number Number of inp	le Specifications	GL7-CHA	
		4 channels	
Input Connector		BNC Terminal / Miniature connector (#10-32UNF)	
Input method		All channels isolated unbalanced input, Simultaneous sampling	
Sampling speed		100kS/s (10µs)~1h	
Built in RAM		2M samples	
Input type		Charge type, IEPE type, Charge type-RMS, IEPE type-RMS, AC, DC, AC-RMS, DC-RMS	
Measurement Acceleration		1 • 2 • 5 • 10 • 20 • 50 • 100 • 200 • 500、1000 • 2000 • 5000 • 10000 •	
range	sensor input	20000 • 50000m/s <sup>2</sup>	
Ü	Voltage input	AC/DC:50 • 100 • 200 • 500mV • 1 • 2 • 5 • 10V	
		RMS: 20·50·100·200 • 500mVrms, 1·2·5Vrms	
		Crest factor: Min. 2Vrms (C.F4), Max 5Vrms (C.F2)	
Sensor	Charge input	0.01pC/ (m/s²)~999.9pC/ (m/s²)	
Sensitivity	IEPE input	0.01mV/ (m/s²)~999.9mV/ (m/s²)	
A/D Converter		Successive Approximation type, 16bits Effective Resolution: 1/40000 of measuring full range	
Input impedan	ce	100kΩ±5%	
Power Supply		22V±10%, 4mA • 8mA±20%	
Maximum Inpu		50,000pC	
Maximum	Between (+) / (-) terminal	25Vp-p	
input voltage	Between channels	25Vp-p	
	Between channel / GND	25Vp-p	
Maximum	Between channels	300Vp-p (1 minute)	
voltage	Between channel / GND	300Vp-p (1 minute)	
solation resistance	Between input / GND	Min. 50 MΩ (at 500 V DC)	
	e rejection ratio	Min. 80 dB (50/60 Hz, Signal source impedance: Max. 300 Ω) 1.5Hz~45kHz	
Frequency	Charge type	1.5HZ~45kHz 1Hz~45kHz	
Response	HPF		
Filter	I PF	Off • 0.15Hz • 1Hz • 10Hz Off • Line (1.5Hz), 3Hz, 6Hz, 10Hz, 30Hz, 50Hz, 60Hz,	
	LFF	100Hz, 300Hz, 500Hz, 1kHz, 3kHz, 5kHz, 10kHz at -30dB/oct	
	AAF	Off • On (Anti-aliasing filter)	
TEDS	Standard	IEEE 1451.4 Class1 (temperate No.25)	
ILDO	Information	OUT as rated output	
Engineering so		Integration (Velocity), Double Integration (Displacement)	
External Dimens	sions (W x D x H)	Approx. 49.2 x 136 x 160mm (Excluding projections)	
Weight	NOTIO (11 X D X T I)	Approx. 850 g	
	t Module Specif	ication	
Model number		GL7-DCO	
Number of output channels		8 channels	
Output connector		SMA Connector	
Output method		All channels common ground	
Sampling speed		100kS/s (10µs)	
Sampling speed Output target		Voltage module, Voltage / Temperature module, High speed voltage module,	
		High voltage module, DC strain module, Charge module	
		Sampling speed from 10µs.	
		Temperature and Humidity data is not compatible.	
		Sine wave, pulsed wave (Duty cycle can be set when creating output dat	
		ramp wave/triangle wave/Simple arbitrary waveform/DC voltage can be outputa)/ by creating data with dedicated PC software.	
		Input signal can be recorded with input type module during output signal is	
		generated from voltage output module.	
	Dr. ii		
Output range	Voltage lodule specificat	±1 • 2 • 5 • 10V F.S.	
Model number	iodule specifical	GL7-L/P	
Model Hulliber		16 channels	
	ut Charlineis		
Number of inp			
Number of inpolential Input method	Logio modo		
Number of inpolential Input method Sampling	Logic mode	Up to 1 M Samples/s (1µs interval)	
Number of inpo Input method Sampling speed	Logic mode Pulse mode	Up to 1 M Samples/s (1µs interval) Up to 10 k Samples/s (100µs interval)	
Number of inposent input method Sampling speed Built-in RAM	Pulse mode	Up to 1 M Samples/s (1µs interval) Up to 10 k Samples/s (100µs interval) 2M samples	
Number of inpi Input method Sampling speed Built-in RAM Measurement	Pulse mode mode	Up to 1 M Samples/s (1µs interval) Up to 10 k Samples/s (100µs interval) 2M samples Selecting of the Logic input mode or Pulse input mode *4	
Number of inp Input method Sampling speed Built-in RAM Measurement Mode	Pulse mode mode Pulse	Up to 1 M Samples/s (1µs interval) Up to 10 k Samples/s (100µs interval) 2M samples Selecting of the Logic input mode or Pulse input mode *4 Rotation count (RPM), Accumulating count, Instant count	
Number of inpi Input method Sampling speed Built-in RAM Measurement Mode	Pulse mode mode Pulse Function	Up to 1 M Samples/s (1µs interval) Up to 10 k Samples/s (10µs interval) 2M samples Selecting of the Logic input mode or Pulse input mode *4 Rotation count (RPM), Accumulating count, Instant count Counting the number of pulses per sampling interval and then it is converted to RPM	
Number of inpi Input method Sampling speed Built-in RAM Measurement Mode Rotation count (RPM)	Pulse mode mode Pulse Function Span	Up to 1 M Samples/s (1µs interval) Up to 10 K Samples/s (100µs interval) 2M samples Selecting of the Logic input mode or Pulse input mode *4 Rotation count (RPM), Accumulating count, Instant count Counting the number of pulses per sampling interval and then it is converted to RPM 50, 500, 5000, 500, 500 K, 500 K, 50 M, 750 M, 750 M prm/F.S.	
Number of inpi Input method Sampling speed Built-in RAM Measurement Mode Rotation count (RPM)	Pulse mode mode Pulse Function Span Function	Up to 1 M Samples/s (1µs interval) Up to 10 k Samples/s (100µs interval) Wasmples Selecting of the Logic input mode or Pulse input mode *4 Rotation count (RPM), Accumulating count, Instant count Counting the number of pulses per sampling interval and then it is converted to RPM 50, 500, 5000, 50 k, 50 k, 50 M, 50 M from/FF.S. Accumulating the number of pulses from the start of measurement	
Number of inpi Input method Sampling Speed Built-in RAM Measurement Mode Rotation count (RPM) Accumulating	Pulse mode  mode Pulse Function Span Function Span Function	Up to 1 M Samples/s (1µs interval) Up to 10 k Samples/s (100µs interval) 2M samples Selecting of the Logic input mode or Pulse input mode *4 Rotation count (RPM), Accumulating count, Instant count Counting the number of pulses per sampling interval and then it is converted to RPM 50, 500, 5000, 50 K, 500 k, 5 M, 50 M, 500 M rpm/F.S. Accumulating the number of pulses from the start of measurement 50, 500, 5000, 50 K, 500 k, 5 M, 50 M, 500 M counts/F.S.	
Number of inpinput method Sampling speed Built-in RAM Measurement Mode Rotation count (RPM) Accumulating count Instant count	Pulse mode  mode Pulse Function Span Function Span Function Span Function	Up to 10 k Samples/s (100µs interval) 2M samples Selecting of the Logic input mode or Pulse input mode *⁴ Rotation count (RPM), Accumulating count, Instant count Counting the rumber of pulses per sampling interval and then it is converted to RPM 50, 500, 5000, 50 k, 50 k, 50 M, 50 M from the start of measurement 50, 500, 5000, 50 k, 50 K, 5 M, 50 M from the start of measurement 50, 500, 5000, 50 k, 50 K, 5 M, 50 M, 50 M counts/F.S.	
Number of inpinput method Sampling speed Built-in RAM Measurement Mode Rotation count (RPM) Accumulating count Instant count	Pulse mode  mode Pulse Function Span Function Span Function Span Function Span Function	Up to 1 M Samples/s (1µs interval) Up to 10 k Samples/s (100µs interval) 2M samples Selecting of the Logic input mode or Pulse input mode *4 Rotation count (RPM), Accumulating count, Instant count Counting the number of pulses per sampling interval and then it is converted to RPM 50, 500, 5000, 50 k, 500 k, 5 M, 50 M, 500 M rpm/F.S. Accumulating the number of pulses from the start of measurement 50, 500, 5000, 50 k, 500 k, 5 M, 50 M, 500 M counts/F.S. Counting the number of pulses per sampling interval (count is reset at each sampling) 50, 500, 5000, 50 k, 500 k, 5 M, 50 M, 500 M counts/F.S.	
Number of inpinput method Sampling speed Built-in RAM Measurement Mode Rotation count (RPM) Accumulating count Instant count	Pulse mode  mode Pulse Function Span Function Span Function Span Function Juency	Up to 1 M Samples/s (1µs interval) Up to 10 k Samples/s (100µs interval) 2M samples Selecting of the Logic input mode or Pulse input mode *4 Rotation count (RPM), Accumulating count, Instant count Counting the number of pulses per sampling interval and then it is converted to RPM 50, 500, 5000, 50 k, 500 k, 5 M, 50 M, 500 M prn/r-S. Accumulating the number of pulses from the start of measurement 50, 500, 5000, 50 k, 500 k, 5 M, 50 M, 500 M counts/r-S. Counting the number of pulses per sampling interval (count is reset at each sampling) 50, 500, 5000, 50 k, 500 k, 5 M, 50 M, 50 M counts/r-S.	
Number of inpinput method Sampling Sampling Speed Speed Rotation count (RPM) Accumulating count Count Max. input frec Max. input frec Max. number of	Pulse mode  mode Pulse Function Span Function Span Function Span guancy foount	Up to 1 M Samples/s (1µs interval) Up to 10 k Samples/s (100µs interval) 2M samples Selecting of the Logic input mode or Pulse input mode *4 Rotation count (RPM), Accumulating count, Instant count Counting the number of pulses per sampling interval and then it is converted to RPM 50, 500, 500, 50, 50, 50, 50, 50, 50, 50	
Number of inpinput method Sampling Speed Built-in RAM Measurement Mode Rotation count (RPM) Accumulating count Instant count Max. input free Max. input free Input signal	Pulse mode  mode Pulse Function Span Function Span Function Span Span Span Span Span Span Juency Jof Count Voltage range	Up to 1 M Samples/s (1µs interval) Up to 10 K Samples/s (100µs interval) 2M samples Selecting of the Logic input mode or Pulse input mode *4 Rotation count (RPM), Accumulating count, Instant count Counting the number of pulses per sampling interval and then it is converted to RPM 50, 500, 5000, 500, 500 K, 500 K, 50 M, 50 M, 500 M prm/F-S. Accumulating the number of pulses from the start of measurement 50, 500, 500, 500, 50 K, 500 K, 50 M, 50 M Counts/F-S. Counting the number of pulses per sampling interval (count is reset at each sampling) 50, 500, 500, 500, 50 K, 500 K, 5 M, 50 M, 500 M counts/F-S. 1 M Hz 15 M counts (24 bits counter is used) 10 to +24 V (common ground)	
Number of inpinput method Sampling Speed Built-in RAM Measurement i Mode Rotation count (RPM) Accumulating count Instant count Max. input free Max. number of	Pulse mode mode Pulse Function Span Function Span Function Span Function Span Junction	Up to 1 M Samples/s (1µs interval) Up to 10 k Samples/s (100µs interval) Wasmples Selecting of the Logic input mode or Pulse input mode *4 Rotation count (RPM), Accumulating count, Instant count Counting the number of pulses per sampling interval and then it is converted to RPM 50, 500, 500, 50 k, 500 k, 5 M, 50 M, 50 M rpm/F.S. Accumulating the number of pulses from the start of measurement 50, 500, 5000, 50 k, 500 k, 5 M, 50 M, 50 M counts/F.S. Accumulating the number of pulses from the start of measurement 50, 500, 5000, 50 k, 500 k, 5 M, 50 M, 50 M counts/F.S. 1M Hz 15 M counts (24 bits counter is used) 10 to +24 V (common ground) 10 to +24 V (common ground) 10 contact (Relay), Open collector, Voltage	
Number of inpilinput method Sampling speed Sampling speed Suitt-in RAM Measurement Mode Rolation count (RPM) Accumulating count instant count Max. input free days input free linput signal	Pulse mode mode Pulse Function Span Function Span Function Span Function Span Function Span Gount Voltage range Signal type Threshold	Up to 1 M Samples/s (1µs interval) Up to 10 K Samples/s (100µs interval) 2M samples Selecting of the Logic input mode or Pulse input mode *6 Rotation count (RPM). Accumulating count, Instant count Counting the number of pulses per sampling interval and then it is converted to RPM 50, 500, 5000, 500, 500 K, 500 K, 50 M, 50 M, 500 M prn/F-S. Accumulating the number of pulses from the start of measurement 50, 500, 5000, 50 K, 500 K, 50 M, 50 M, 50 M Counts/F-S. Counting the number of pulses per sampling interval (count is reset at each sampling) 50, 500, 500, 500, 50 K, 50 K, 50 M, 50 M, 50 M counts/F-S. 1M Hz 15 M counts (24 bits counter is used) 10 to +24 V (common ground) Contact (Relay), Open collector, Voltage Approx. 2.5 V	
Number of inpl Input method Sampling Speed Built-in RAM Measurement Mode Rotation count (RPM) Accumulating count Instant count Max. input free Max. number of	Pulse mode mode Pulse Function Span Function Span Function Span Function Span Junction	Up to 1 M Samples/s (1µs interval) Up to 10 k Samples/s (100µs interval) 2M samples Selecting of the Logic input mode or Pulse input mode *4 Rotation count (RPM), Accumulating count, Instant count Counting the number of pulses per sampling interval and then it is converted to RPM 50, 500, 500, 500, 50 k, 500 k, 5 M, 50 M, 500 M prn/r-S. Accumulating the number of pulses from the start of measurement 50, 500, 500, 50 k, 500 k, 5 M, 50 M, 50 M on M counts/r-S. Accumulating the number of pulses per sampling interval (count is reset at each sampling) 50, 500, 500, 500, 50 k, 500 k, 5 M, 50 M, 50 M counts/r-S. 1 M Hz 15 M counts (24 bits counter is used) 0 to +24 V (common ground) Contact (Relay), Open collector, Voltage Approx. 2.5 V Approx. 0.5 V (2.5 V to 3 V)	
Number of inplinput method Sampling speed Built-in RAM Measurement Mode Rolation count (RPM) Accumulating count Instant count Max. input free Max. number of Input signal	Pulse mode mode Pulse Function Span Function Span Function Span Function Span Function Span Gount Voltage range Signal type Threshold	Up to 1 M Samples/s (1µs interval) Up to 10 K Samples/s (100µs interval) 2M samples Selecting of the Logic input mode or Pulse input mode *6 Rotation count (RPM). Accumulating count, Instant count Counting the number of pulses per sampling interval and then it is converted to RPM 50, 500, 5000, 500, 500 K, 500 K, 50 M, 50 M, 500 M prn/F-S. Accumulating the number of pulses from the start of measurement 50, 500, 5000, 50 K, 500 K, 50 M, 50 M, 50 M Counts/F-S. Counting the number of pulses per sampling interval (count is reset at each sampling) 50, 500, 500, 500, 50 K, 50 K, 50 M, 50 M, 50 M counts/F-S. 1M Hz 15 M counts (24 bits counter is used) 10 to +24 V (common ground) Contact (Relay), Open collector, Voltage Approx. 2.5 V	

- Weight Approx. 700 g

  \*1 Using optional humidity sensor (B-530)

  \*2 Remote sensing is not available when a NDIS connector is used When a bridge box is used, the connection needs to be 4-wire or 6-wire full bridge Bridge excitation: Constant current drives a strain gauge type converter or a 4-wire full bridge.

  When connecting with a Half bridge (Opposite side), an additional bridge box is required. The shunt calibration is available only when the connection is using a 3-wire, 4-wire quarter bridge, 5-wire full bridge, or 6-wire full bridge.

  \*3 When the built-in in bridge resistance is 1200, the excitation voltage needs to be set it to 1V, 2V, or 2.5V. The gauge type and built-in resistance can be selected by a DIP-SW which is located on the front face of the module.

  \*4 The measuring mode is set in each module (16 channels) In Logic mode, up to 7 modules can be attached to one main module. (max. 112ch) in Pulse mode, up to 2 modules can be attached to one main module. The measuring mode is a filmited to up to 112 channels.

Brand names and product names listed in this brochure are the trademarks or registered trademarks of their respective owners. Specifications are subject to change without notice.



