

MG

MG SERIES

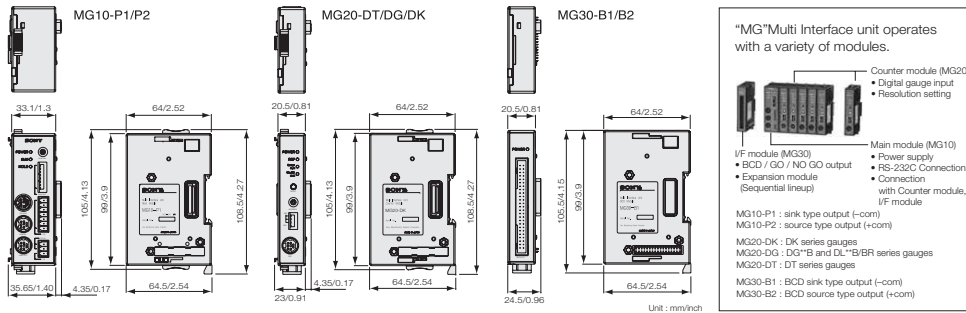
Flexible digital gauge system for multi-point measuring .

- Up to 64 connectable gauges
- Input resolutions : 0.1μm, 0.5μm, 1μm, 5μm, and 10μm.
- Compatible with RS-232C, BCD
- Operating voltage : 12-24VDC
- DIN rail mounting (35mm)

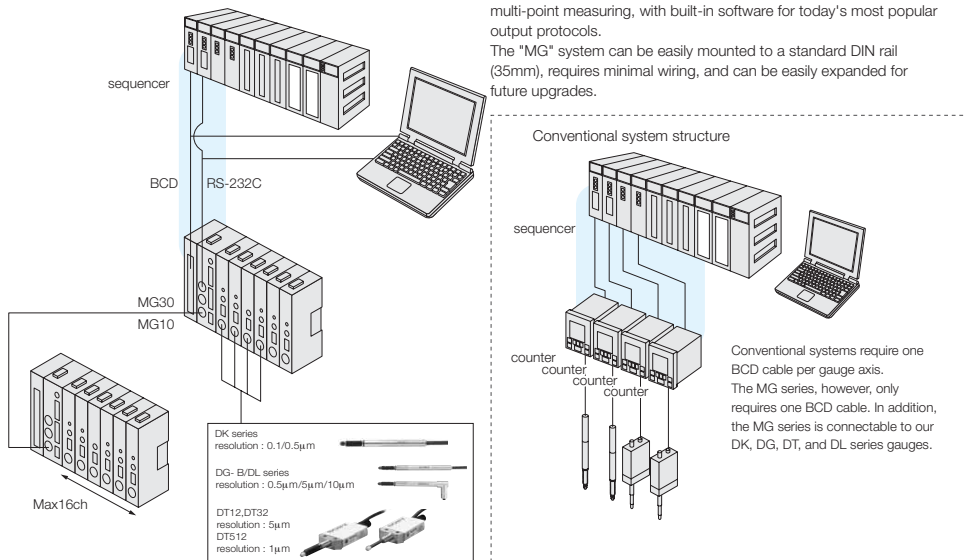


Interface unit

System structure



MG series System structures



Main module		
Model name	MG10-P1	MG10-P2
Power source	Supply voltage	DC12-24V(11-26.4V)/Min. startup time: 100ms or less
	Power consumption	2.0W + total power consumption for connected modules ¹⁾
	Inrush current (10ms)	10A or less (when maximum number of modules are connected)
	Power supply protection	Fuse (5A fuse is built in.)
Communication	Communication I/F	RS-232C (EIA-232C or equivalent)
	Baud rate setting	2400 / 9600 / 19200 / 38400 bps (set with DIP switch)
	Data length	7 / 8 bit (set with DIP switch)
	Stop bit	1 / 2 bit (set with DIP switch)
	Parity	none / ODD / EVEN (set with DIP switch)
Linkage function	Delimiter	CR / CR-LF (set with DIP switch)
	Maximum number of linkages	16 (total of counter modules: 64)
I / O	Maximum length of linking cable	10m
	Input format	source input (+COM) sink input (-COM)
	Output format	Photo coupler insulation, external power: DC5 - 24V sink type (-COM) source type (+COM)
	Input signal	Photo coupler insulation, external power: DC5 - 24V reset, pause, start, latching, and data out trigger to whole channels
	Output signal	integrated alarm
	Counter modules	MG20-DK, MG20-DG and MG-20DT (available for mixed use, up to 16 modules) ¹⁾
Interface modules	MG30-B1, MG30-B2	

¹⁾ Total power of modules connected to MG10 should not be over 54W (12VDC Input) or 108 W (24VDC Input).

Counter module				
Model name	MG20-DK	MG20-DG	MG20-DT	
Power consumption	1W + power consumption for connected gauge	1.4W (connected to DG-B) / 0.5W (connected to DL-B)	0.9W	
	Corresponding gauge	DK series (A/B quadrature input)	DG "B" series, DL "B"/DL "BR" series	DT series
Measuring unit input	Allowable resolution setting ¹⁾	10 / 5 / 1 / 0.5 / 0.1μm	10 / 5 / 0.5μm	5μm (DT12/32) 1μm (DT512)
	Maximum response speed	set with DIP switch		Subject to the specification of the connected gauge
Others	Alarm	Photo coupler insulation, external power: DC5 - 24V		1m / s
	Reference point ²⁾	REF-LED (reference point loaded) shows on the display after the reference point is detected. Set "1" or preset alarm on the counter when the reference point is detected.		
		S-ALM LED activates by excess speed/acceleration of measuring unit. C-ALM LED activates by excess speed of the internal circuit of counter.		
		Alarm display is cancelled by reset command from MG10 or with the reset button of main unit.		

²⁾ Set the resolution value of the connected gauge. ³⁾ MG20-DG work only connect to DL "BR" series

Interface module		
Model name	MG30-B1	MG30-B2
Power consumption	1W	
	Input format	source input (+com) sink input (-com)
I/O	Output format	Photo coupler insulation, external power: DC5 - 24V sink type (-com) source type (+com)
	Input signal	Photo coupler insulation, external power: DC5 - 24V DRO / channel address / measuring mode shifting / comparator shifting / reset / start / posing / reference point loaded
	Output signal	BCD data (6 digits) / READY / code / GO/NO GO output / alarm / reference point loaded
Output setting	timer (1-128ms) / OUT / OR / polarity (set with internal DIP switch)	
All models	Operating temperature	0-+50°C (No condensation)
	Storage temperature	-10-+60°C (20-90%RH)