

# MG10A/20A/30

## Interface

- ▲ MG10A-P1 : RS-232C(Conforming to EIA-232C)
- ▲ MG10A-P2 : RS-232C(Conforming to EIA-232C)

Compatible with DK/DT Series

## Main module specifications

Model		MG10A-P1	MG10A-P2
Power source	Power supply	DC12~24 V (11~26.4 V) Start up time: 100ms or less	
	Power consumption	2.0W + total power consumption for connected modules*1	
	Inrush current(10 ms)	10A or less (When the maximum number of modules are connected)	
	Power supply protection	Fuses (5-A fuses are 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)	
	Maximum number of linking cable	10m	
I/O	Input format	Source input(+COM) Photocoupler insulation, external power: 5~24V DC	Sink input(-COM)
	Output format	Open collector output sink type(-COM) Photocoupler insulation, external power: 5~24V DC	Source input(+COM)
	Input signal	Reset, Pause, Start, Latching, and Data out trigger to whole channel	
	Output signal	Intergrated alarm	
Connectable modules	Counter modules	MG20A-DK, MG20A-DG, MG20A-DT (Available for mixed use, up to 16 modules)*1	
	Interface modules	MG30-B1, MG30-B2*1	

\*1 Total power of modules connected to MG10A should not be over 54W(at 12 VDC input) or 108W(at 24 VDC input)

\*Magnescale reserves the right to change product specifications without prior notice.

## Counter module specifications

Model		MG20A-DK	MG20A-DT
Power consumption		1W + power consumption for connected measuring unit	0.8 W
Measuring unit input	Corresponding measuring unit	DK Series (Voltage differential A/B quadrature input)	DT Series
	Allowable resolution setting*2	10/5/10/0.5/0.1 μm set with DIP switch	5 μm (DT12/32) 1 μm (DT512)
	Maximum response speed	Subject to the specification of connected measuring unit	1m/s
	Maximum response acceleration	Subject to the specification of connected measuring unit	2400m/s <sup>2</sup>
	Reference point	REF-LED(reference point loaded) shows on the display after the reference point is detected Set "0" or preset value on the counter when the reference point is detected	—
Others	Alarm	S-ALM LED activates by excess speed/acceleration of measuring unit C-ALM LED activates by excess speed of the internal circuit of counter The alarm display is cancelled by reset command from MG10A or with the reset button of main unit	

\*2 Set the resolution value of the connected measuring unit

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## Interface module specifications

Model		MG30-B1	MG30-B2
Power consumption		1W	
I/O	Input format	Source input(+COM) Counterpart output circuit: Current sink input(-COM) Photocoupler insulation, external power: 5~24V DC	Current sink input(-COM) Counterpart output circuit: Source type(+COM)
	Output format	Open collector output sink type(-COM) Source type(+COM)	Source type(+COM) Counterpart output circuit(+COM): Source type(-COM) Photocoupler insulation, external power: 5~24V DC
	Input signal	DRQ, channel address, Measuring mode shifting, Comparator shifting, Reset, Start, Pause, Reference-point loaded	
	Output signal	BCD data(6 digits) READY GO GO/No-go output Alarm reference point	
Output setting		Timer(1 to 128ms) OUT/OR Polarity (Set with internal DIP switch)	

All models	Operation temperature and humidity range	0~+50 °C (No condensation)
	Storage temperature and humidity range	-10~+60 °C (20~90%RH)

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