High accuracy detector unit for position control

- •Generates A/B phase output signal with a resolution of 0.1 µm for feedback to an NC unit and up/down output signal for a display unit.
- •Selectable resolution and output pulse width
- •Compact design of 32 x 171 x 144 mm / 1.3" x 6.7" x 5.7" (W x H x D) permits the detector to be located in tight spaces as in a switchboard.
- Operable from 5V power supply. With the optional PU20 power supply unit, power for up to 3 axes can be
- •A/B phase signal, up/down signal, zero point signal and alarm signal output by differential line driver.

Specifications

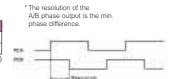
Model	MD21					
Resolution	0.1, 0.2 µm selectable*					
Output pulse width	0.25, 0.5, 1, 2, 2.5, 5, 10 or 20 μs selectable					
Max. response speed	See table below					
Output signal	A/B phase and up/down output by differential line driver (equivalent to SN75113); both simultaneous					
Zero point signal	In synch with scale signal					
Alarm	Max. response speed exceeded, cable broken or disconnected, other circuit errors					
Reset	Use reset key operation or external input					
Power supply	+ 5 V DC + 5% -2%					
Power consumption	Max. 3 W					
Operating temperature	0 °C to 50 °C / 32 °F to 122 °F					
Storage temperature	-10 °C to 70 °C / 14 °F to 158 °F					
Dimensions	32 x 171 x 144 mm/ 1.3" x 6.7" x 5.7" (W x H x D)					
Mass	0.8 kg/ 1.76 lbs					

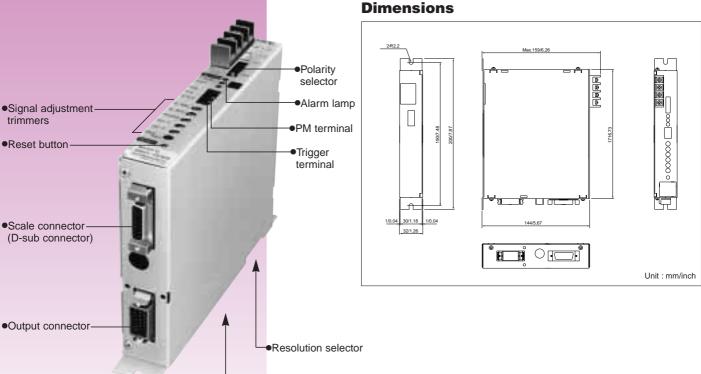
Maximum response speed

Resolution	Output pulse width (µs)							
(µm)	0.25	0.5	1	2	2.5		10	20
0.1	18	9	4.5	2.2	1.8	0.8	0.4	0.2
0.2	30	18	9	4.5	3.6	1.8	0.8	0.4
							(Unit	t : m/min)

Zero point response speed

Resolution (µm)	Response speed (m/min)
0.1	0.15
0.2	0.3
	(Unit : m/mir





Pulse width selector