

Microint series - interpolators

User Guide

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- **Integral set-up LED**
- **Standard 1Vpp analogue input (special input is optional)**
- **Industry standard RS422A output**
- **Interpolation factors from x10 to x500**
- **Resolutions from 5µm to 10nm**
- **Compatible with Inoservo's Microlin Maglin series SIN/COS encoder and Renishaw's RGX planar encoder system**



Part	Interpolation factor	Resolution using 20µm scale
Microint-10	X10	0.5µm
Microint-20	X20	0.25µm
Microint-40	X40	0.125µm
Microint-50	X50	0.1µm
Microint-80	X80	62.5nm
Microint-100	X100	50nm
Microint-125	X125	40nm
Microint-200	X200	25nm
Microint-250	X250	20nm
Microint-500	X500	10nm

The Microint range of interpolators is designed to accompany the Inoservo's Microlin, Maglin and Renishaw's RG2 20µm and RG4 40µm encoder systems by offering a wide range of interpolation factors that convert standard 1Vpp analogue outputs to industry standard RS422A digital outputs.

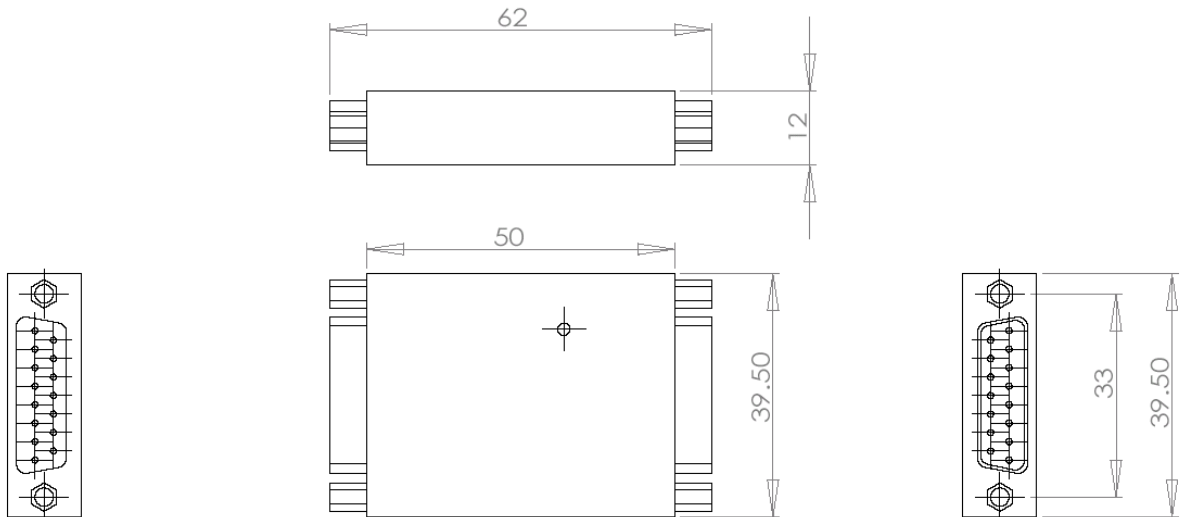
These interpolators can be used with Inoservo's Microlin, Maglin and Renishaw's RGX planar encoder system to enable easy integration with industry standard digital controller inputs. When interfaced with 40µm pitch systems such as the RGH34 and RGH41, the interpolators give resolutions down to 20nm.

When used with 20µm pitch systems such as the Microlin RGH22 and RGH24, the interpolators will resolve down to 10nm.

The Microint interpolator range allows the customer to utilise either analogue or digital outputs from the same equipment. Analogue signals can also be interpolated to give compatibility with digital controller inputs without the added investment required for the

re-design, purchase, and installation of new readheads.

Microint dimensions:



Input/Output pin definition:

Input pin definition (plug)

Pin	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Function	NC	NC	NC	NC	GND	+5V	COS+	SIN-	NC	NC	ZERO+	ZERO-	NC	COS-	SIN+

Output pin definition (socket)

Pin	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Function	B+	GND	A+	NC	NC	NC	+5V	NC	B-	A-	Z-	Z+	NC	NC	NC

Operating and electrical specifications:

Power supply:	5V \pm 5% <300mA (interface only)
Temperature:	0-55度
Humidity:	10-90% RH non-condensing
Sealing:	IP40
Connectors (input/output):	15-way D type socket/plug