



METIRIO® A1

METIRIO® A1, primed for plug and play applications, is equipped with cable, connector and mounting threads to ensure connectivity to closed loop motion systems.

The A1 version of the **METIRIO®** Readhead is terminated with a D-SUB 15 male connector, providing differential analog signals and I²C-Interface pins. An interpolation module can be also attached to the A1 plug. This module provides BiSS-C Interface and typical ABZ-signals.

Size: 17 x 10 x 4 mm

	Key Benefits
Compact Size [mm]	17 x 10 x 4
Low Current Consumption [mA]	20
Position Resolution [nm]	0.4 (@ 1 m/s)
High Speed [m/s]	10
Central Wavelength [nm]	850 (Invisible)
	Electrical Data
Supply Voltage VDD [V]	3 to 5.5
Output Position Signal (sine) [Vpp]	1
Output Reference Signal (square) [VDD]	RS485
Bandwidth (f3dB) [kHz]	500
ESD Susceptibility (HBM) [kV]	4 at each pin
Startup Time [μs]	150
Digital Interface	TWI
	Environment
UHV compatibility [mbar]	HV (1E-6 mbar); UHV (1E-11 mbar)
Maximum bake-out temperature [°C]	150
Operating temperature range [°C]	0 - 80
Humidity (40 °C) [%]	80 non-condensing
Vibration EN 60068-2-6	500 m/s ² , 2000 Hz
Shock EN 60068-2-27	1000 m/s ² , 11 ms
	Scale Compatibility
Grating Type	reflective

Scale Pitch [µm]	20
Scale Type	linear, convex, rotary (down to 12 mm diameter)
Allowed Working Distances [mm]	1.2 mm (standard), more options upon request