

COMPACT

 **MicroE**

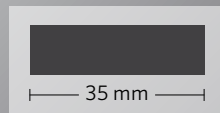
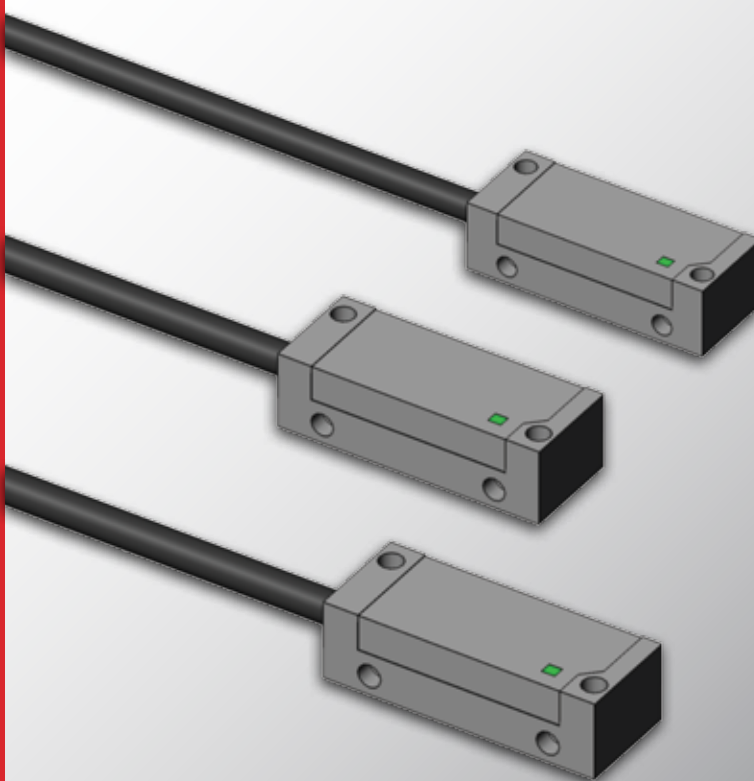
*Motion Control Starts Here.*



# Veratus™ Series Encoders

Compact Precision Encoders  
for the World's Machines  
and Instruments

Built with MicroE's new VeraPath™  
technology, the Veratus Series delivers  
best-in-class reliability, signal stability,  
and dirt immunity in a compact package  
with unparalleled ease of use.



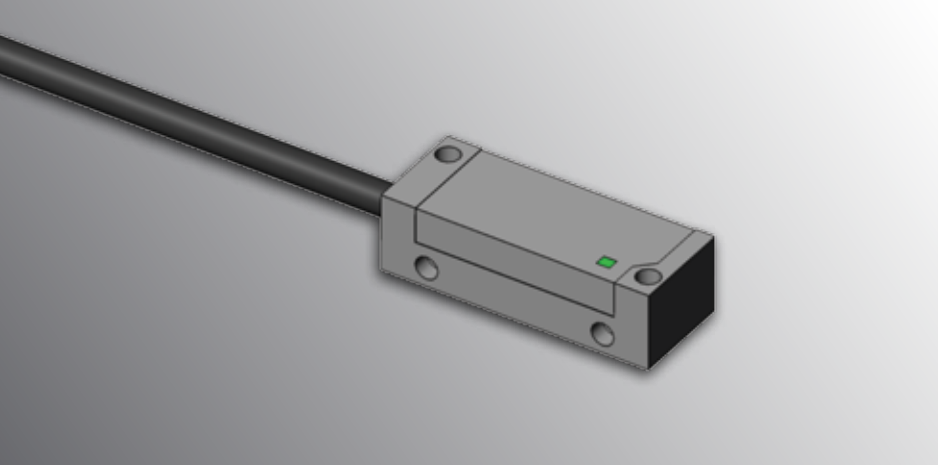
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# Veratus™ Series Encoders

Compact Precision Encoders for the World's Machines and Instruments



## Smart and Reliable.

Veratus is the only encoder in its class that delivers the reliability, signal stability, and dirt immunity required in precision industrial applications with all interpolation, AGC, and signal processing performed in the sensor head. No additional PCBs, adapters, or dongles are necessary.

Built using new VeraPath™ technology from MicroE, Veratus is engineered with advanced optical filtering and state-of-the-art signal processing and electronics, ensuring low position noise (jitter) and smooth velocity control over a wide range of operating conditions. Veratus is available with up to 20 nm resolution and offers industry standard analog and digital incremental encoder outputs, a phased LSB index, and easy-to-install magnetic limits and index select marks.

Veratus is compatible with MicroE's wide range of linear and rotary gratings and scales, enabling robust performance and easy installation.

### Benefits

- Dirt immunity and reliable performance in a wide range of applications and environments; advanced optical filtering and signal processing
- Compact footprint; interpolation and AGC in sensor head
- Automatic calibration; plug and go
- Multiple mounting configurations
- Built-in limits, flexible index selection
- Multiple linear and rotary grating/scale options
- Status LED in sensor head

### Specifications

Dimensions:	35 x 13.5 x 10 mm
Interfaces:	A-quad-B or 1Vpp sin/cos
Resolution: (Interpolation in Sensor Head)	5 µm - 20 nm (linear) 2,000 CPR - 75M CPR (rotary)
Accuracy Class:	Up to +/- 1 µm (linear glass) +/- 3 µm (linear metal tape) Up to +/- 2 arc-seconds (rotary)
Input Voltage:	5 VDC
Current Consumption:	150 mA
Max Speed:	5 m/s
Index:	LSB (phased to A/B signals)
Outputs:	Alarm, Limits (2)
Status LED:	Yes
Operating Environment:	Atmospheric
Scale Pitch:	20 µm
Repeatability: (Hysteresis)	≤ 1 LSB
Typical SDE:	< 40 nm
Weight:	< 15 g (sensor head), < 30 g/m (cable)
Grating Compatibility:	Linear and Rotary (angle)

Specifications subject to change.



125 Middlesex Turnpike, Bedford, MA 01730  
Tel: 781.266.5700 | info@microesys.com



[www.microesystems.com](http://www.microesystems.com)