



# MIC-01, multi interface convertor

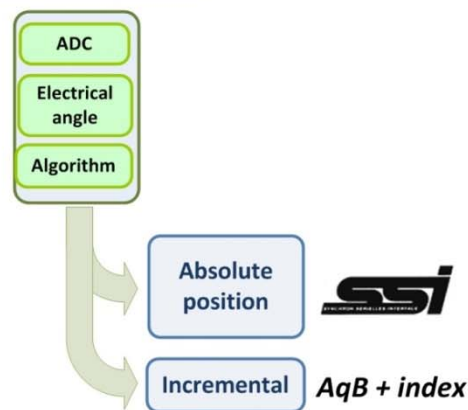
DS, Absolute Position, Rotary & Linear Electric Encoder™



The Multi Interface Converter – **MIC** provides conversion of the original analog Sine / Cosine electric angle to wide variety of common outputs as absolute mechanical position.

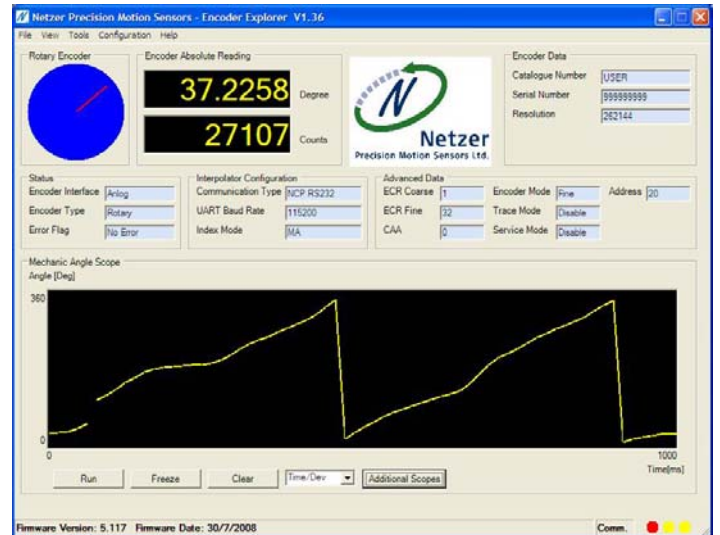
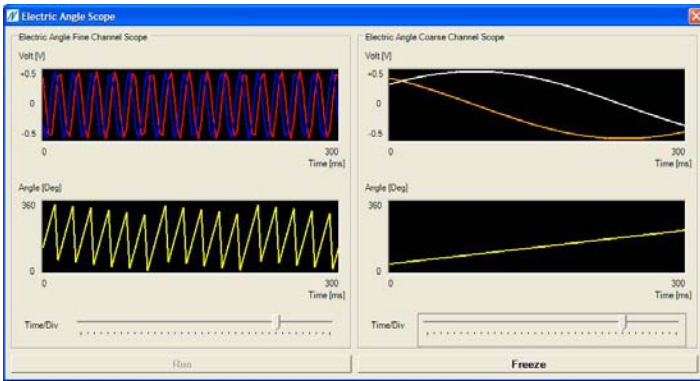
The MIC provides conversion to standard industrial feedbacks as AqB & SSI, set up interface is available via USB based on Netzer Communication protocol (NCP).

The MIC main purpose is for demonstration, development and early stage integration. For full operational interpolators please refer to the [CS2SSI](#) for SSI output and **CS2AqB** for AqB + index.



Electrical	
Supply voltage	+4.6 to +5.5 V <sup>(1)</sup>
Power consumption	~ 100 mA
Environment	
Operating temperature range	0 C to +40 °C
Relative Humidity	<98 % non condensate
Enclose protection	IP 40
Dimensions	100 x 55 x 25mm

Input	
Analog	Sine / Cosine
Output	
Digital	Absolute - SSI
	AqB + index
Communication (NCP) <sup>(2)</sup>	RS-232 , RS-485 ,USB



**Notes:**

1. USB as standard
2. **Netzer Communication Protocol:**  
The **NCP** is a bidirectional serial protocol interface designed for easy access to the absolute position and setup parameters via USB and RS-232.

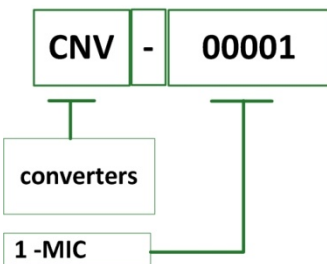
Setup and Calibration with Netzer Encoder Explorer

**Related Documents**

- AN-01** - The Electric Encoder™.
- AN-03** - Absolute angle computation.
- AN-05** - Accuracy, Resolution, and Repeatability.
- MIC-01-UM**, MIC user manual

Resolution conversion table				
bits	mDegrees/ count	ArcSec/ count	mRad/ count	Counts/ Revolution
12	87.8906	316.4063	1.5340	4,096
13	43.9453	158.2031	0.7670	8,192
14	21.9727	79.1016	0.3835	16,384
15	10.9863	39.5508	0.1917	32,768
16	5.4932	19.7754	0.0959	65,536
17	2.7466	9.8877	0.0479	131,072
18	1.3733	4.9438	0.0240	262,144
19	0.6866	2.4719	0.0120	524,288
20	0.3433	1.2360	0.0060	1,048,576
21	0.1717	0.6180	0.0030	2,097,152
22	0.0858	0.3090	0.0015	4,194,304

**Order Format**



**Package Includes:**  
- MIC  
- USB cable

**MIC Connectors**

