

### NanoMIC

Netzer NanoMIC converter is the best solution for full integration of the Netzer electric encoder products.

It provides a smooth, easy and fast interface for encoder calibration and SSI or BiSS observation and debug, according with our EE SW tool.



The NanoMIC Simplifies the integration phase of the position sensor by providing dual interfaces for the user.

- (i) setup and configuration by using Netzer Encoder Explorer over NCP protocol and
- (ii) operational mode over SSI or BiSS and AqB.



NanoMIC-V01

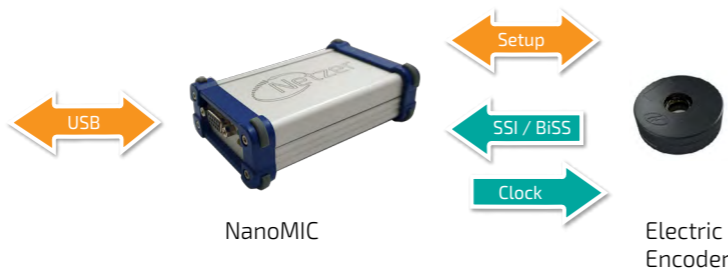
### Features & Technical Data

- The NanoMIC and encoder are supplied with the USB-C connector.
- Additional external 5VDC is optional for encoder powering only.
- Full digital interface support for high speed SSI/BiSS (optional AqB).
- PC connection for calibration and maintenance routines.
- Dual connector supports SSI/BiSS or AqB encoders.
- Light weight small box.
- LED indication for power and encoder connectivity.
- The NanoMIC User Kit Package Contains: NanoMIC and the required cables: DB-9 to DB-15 and USB-C.
- Max. SSI/BiSS word length - 32 bit.
- Clock frequency - 0.2 to 5 MHz for Q-Core encoders and 2 MHz for non Q-Core encoders.

### Ordering Code

Nanomic-KIT-01 (includes):

- NanoMIC
- CB-00087 - NanoMIC SSI / BiSS cable
- CB-01054 - USB 2.0 type C to A, 1m, 3A



### Electrical Interconnection



5 VDC: optional external P.S. (future option)  
TCP/IP: Currently this option is not enabled.  
USB-C: PC data communication and 5 VDC P.S. USB-2, USB-3



ENCODER: DB-15 interface to the encoder, SSI / BiSS / AqB  
COM: Data TX/RX  
Power Indicators: Encoder (top), NanoMIC power (bottom)

### Encoder - NanoMIC Cable, CB-00087

#	DB-9	Remarks	DB-15	
8	5V	Red	P.S.	1
5	GND	Black	GND / RTN	9
3	Data+	Green	Data / NCP TX	6
4	Data-	Yellow		7
1	Clock-	Blue	Clock / NCP RX	14
2	Clock+	Gray		15

### Encoder Explorer

Electric Encoder Explorer V 4.0 and higher supports the NanoMIC working modes (MS WIN 7/8/10) - [updated installation file located on Netzer web site.](#)

### Working Modes

The NanoMIC supports:

- (i) Setup mode (default), Configuration, Calibration, via NCP communication. Logger indicated by green or dark blue dial.
- (ii) Operational mode, SSI/BiSS, on line position indication over SSI or BiSS, indicated by Magenta color dial.

Communication parameters  
Clock 1MHz default  
Resolution: by encoder type

