

## USB MINI-COUNT

### Encoder interface for up to three SinCos / incremental encoder

The **USB MINI-COUNT** is the appealingly simple solution that is especially designed for the recording of encoder signals. The USB MINI-COUNTER ALSO IMPRESSES WITH ITS compact design.

Three 15-pole D-Sub sockets are available for the connection of incremental encoders. Incremental encoders and Heidenhain glass scales can be connected for position recording. The facility for the parallel evaluation of several transmitter systems allows high-precision positioning in the micrometre range.

The USB MINI-COUNT is freely programmable with the public domain Aposs® win Software.

A USB interface is available for the visualization with PC systems.

#### Your chances / your benefits

- ◆ Compact solution
- ◆ High-precision position recording based on parallel evaluation
- ◆ Connections with incremental encoder and Heidenhain glass linear scales
- ◆ Latch inputs for high-precision recording of positions
- ◆ USB interface for data exchange with SPS and PC systems



#### Fields of application

- ◆ X/Y/Z position recording in measuring systems, robots, analysis and handling devices

#### I/O functions

- ◆ Reading, setting, interrupt control
- ◆ Latch inputs

#### Bus and control functions

- ◆ Interrupts on inputs, bus bits, positions, etc.
- ◆ Arithmetic and bit handling
- ◆ Conditional branches and loop constructions
- ◆ Freely programmable with the public domain Aposs® win software

#### Conclusion

**USB MINI-COUNT** = maximum positioning accuracy for three incremental encoders!

#### P.S.

The **USB MINI-COUNT** with the built-in connection technology offers a perfect combination with Heidenhain glass scales.

<b>Electrical data</b>			
Control: supply	24 V DC ±25 %	180 mA	three connected encoders
<b>CPU &amp; memory</b>			
Microprocessor	TI F28M35H52C2	DSP 150 MHz / ARM 75 MHz	
Main and program memory	64 kByte SRAM	2x512 kByte flash	2x32 kByte RAM
<b>Encoder connections</b>			
Sine/cosine encoder (Heidenhain 1Vss interface)	5 V DC ±5 % / encoder max. 300 mA	SinCos 0.6 – 1.2 Vss, max.150kHz	diff. centr. (1.5 v DC resolution: 1 sinus = 256 qc
Incremental encoder	5 V DC ±5 % / encoder max. 300 mA	max. 5 Mhz	RS422 diff. (5V)
<b>Digital inputs &amp; outputs</b>			
Inputs 1 - 6 can be configured as marker signal for latching the encoder positions			
Digital inputs	6	Low: < 4.6 V / high: > 18 V	max. 40 V, max. 200 kHz
Digital outputs	optional on request		resistant to short circuit
<b>Position latch</b>			
Number of position latch register	3		
Config. trigger signals/latch	9	Encoder 1-3 / digital inputs 1-6	
<b>Interfaces</b>			
Serial interface	USB 2.0		data exchange & visualization
<b>LED</b>			
Status	3		
<b>Mechanical data</b>			
Design, assembly technology	compact metal housing		
Length x height x depth / weight	180 x 35 x 63 mm	0.3 kg	
Connection technology	DSUB, Molex		
<b>Ambient conditions</b>			
Operation / storage	0...+45° C / -20...+85° C	20...80 % humidity	non-condensing
<b>Model and article numbers</b>			
USB MINI COUNT	art.no. 1428		
<b>Customer-specific connection/housing technology and functional features on request!</b>			

Pin assignment D-Sub 15

