

Interpolation Units

IPE40 / IPE201 / IPE2000-USB / IPE16000-USB

Characteristics:

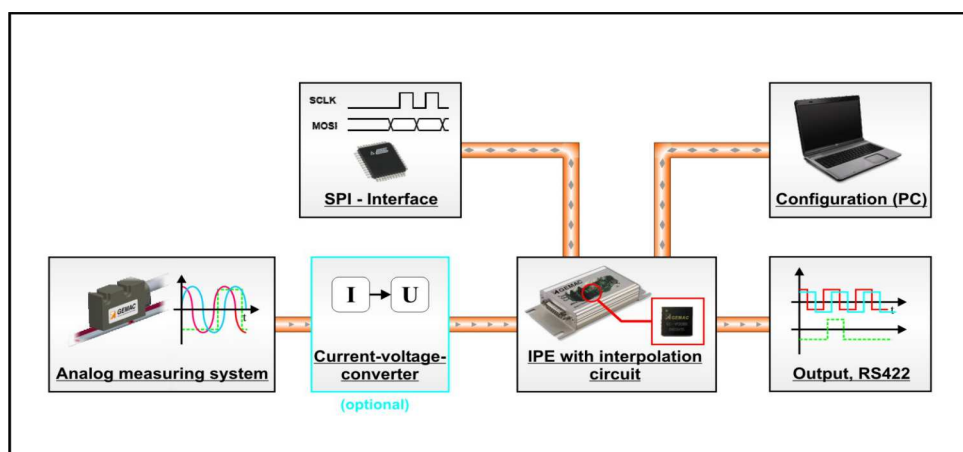
- Connection of position or angular measuring system with sine shaped output signals
- Models for voltage or current input signals available
- Selectable interpolation rate
- Patented gain and offset regulation (IPE201, IPE2000-USB, IPE16000-USB)
- Highly dynamic and short signal propagation time
- Reference mark evaluation
- Sensor error detection
- Output signals: RS422, SPI, USB
- Extruded housing (IP20)
- Simple configuration via USB, status LED



IPE 2000-USB with status LED

The interpolation units are suitable for connection to incremental angular and positioning measurement systems with sine shaped signals. So these units can handle a big range of different encoder systems working on various principles. The converting results will be output as square wave signals via RS422 and SPI interface and/or via SPI or USB interface.

Block Diagram:



Technical Data*:

General Parameters	IPE40	IPE201	IPE2000-USB	IPE16000-USB
Power supply	5VDC \pm 1%			
Current consumption	<150mA			
Dimensions	Extruded aluminum housing: 55mm x 80mm x 20mm			
Connector	Sub-D 15-pole, Heidenhain standard			
Temperature range	0°C ... 70°C			
Signal Processing				
Input signals	1V _{ss} sine / cosine, 0.6V reference			0.05V _{ss} ... 4V _{ss}
	11 μ A _{ss} sine / cosine, 7 μ A reference (upon request)			
Interpolation rate (IPR)	4 ... 40	20 ... 256	100 ... 2 048	100 ... 16 384
Input frequency	1.2MHz	440kHz	260kHz	15kHz
Output signals	RS422, reference, error signal			
	USB / SPI interface			

*For a more detailed description of the technical data refer to the according user manual www.gemac-chemnitz.de.

Ordering Information:

Product Type	Description	Article Number
IPE40	Interpolation Unit IPE40	PR-46900-00
IPE201	Interpolation Unit IPE201– Voltage Version	PR-46201-00
IPE2000-USB	Interpolation Unit IPE2000-USB – Voltage Version	PR-44100-10
IPE16000-USB	Interpolation Unit IPE16000-USB – Voltage Version	PR-44120-00

*upon request