Compact 4/8-Channel Front-End

KEY FEATURES

- 4 or 8 analog input channels
- 204.8 kHz simultaneous sampling
- IEPE sensor conditioning user selectable on each channel
- TEDS support
- 2 source output channels
- Safety shutdown and power loss protection for source channels
- 2 tacho inputs
- Digital I/O's for remote control, e. g. climatic chamber control
- DSP powered real-time processing
- Synchronization of multiple m+p VibPilot front-ends
- Ethernet and USB host interfaces
- Dust-proof, rugged housing
- Fan-less, noise-free operation
- AC/DC supply floating or grounded, only 20 W power consumption

With the 4/8-channel m+p VibPilot, m+p international sets a new standard for affordable performance in vibration control and dynamic signal analysis. m+p VibPilot is based on the latest generation of IC technology resulting in high-precision measurement ability and impressive real-time performance in signal analysis.

Operation Indoors and Outdoors

Compact and rugged, m+p VibPilot has a robust look and feel and a clearly arranged front panel with four or eight BNC connectors. Thanks to its dust-proof design, you can operate it indoors or outdoors even under harsh conditions. m+p VibPilot provides both Ethernet and USB connectivity to a host PC or laptop and is operated by either an external AC mains power supply or by a DC supply, e. g. for in-car operation. The fan-less, noise-free operation facilitates noise measurements requiring a quiet environment.

Support of Multiple Front-Ends

To extend input channel capability, m+p VibPilot devices can be synchronized via the clock in/clock out circuitry without influencing their excellent measurement performance. This allows you to use additional channels (e. g. 2 x 8 input channels) or to combine vibration tests and dynamic signal acquisition applications with ease. m+p Analyzer for noise and vibration analysis supports up to six m+p VibPilot devices with a total of 48 input channels.

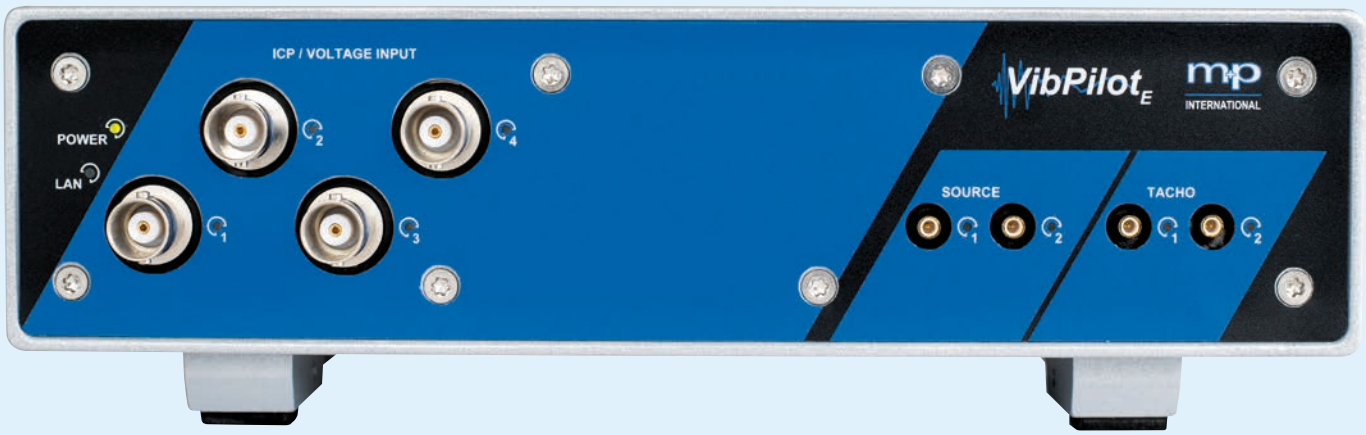
m+p VibPilot. Small in size. Huge in performance.

Input/Output Channels

Equipped with 24-bit sigma-delta A/D converters with up to 204.8 kHz sampling rate, m+p VibPilot allows for alias-protected measurements in a frequency range up to 80 kHz and with more than 120 dB spurious-free dynamic range. The analog input circuits have advanced sigma-delta converters which offer advantages such as simultaneous sampling by independent A/D converters on each input, reduced noise and improved accuracy due to 64 times oversampling on each input. Both analog and digital filtering are used for full aliasing protection and they provide excellent low-level signal-to-noise performance and differential linearity. The input voltage range of ± 1 V and ± 10 V peak full scale is selectable per channel.

As well as normal differential voltage inputs with AC/DC coupling, signal conditioning for the analog input channels also provides source capabilities for IEPE sensors, including cable break indicators, and an interface for accessing standardized Transducer Electronic Data Sheets (TEDS). TEDS support allows automatic front-end setup based on information stored in the transducer, e. g. sensitivity, calibration data and serial number.

Two precision low-noise analog outputs are available together with hardware shutdown circuitry which ramps down the source signals in a controlled manner in case of emergency.



4-channel m+p VibPilot

8-channel m+p VibPilot

Tacho Inputs

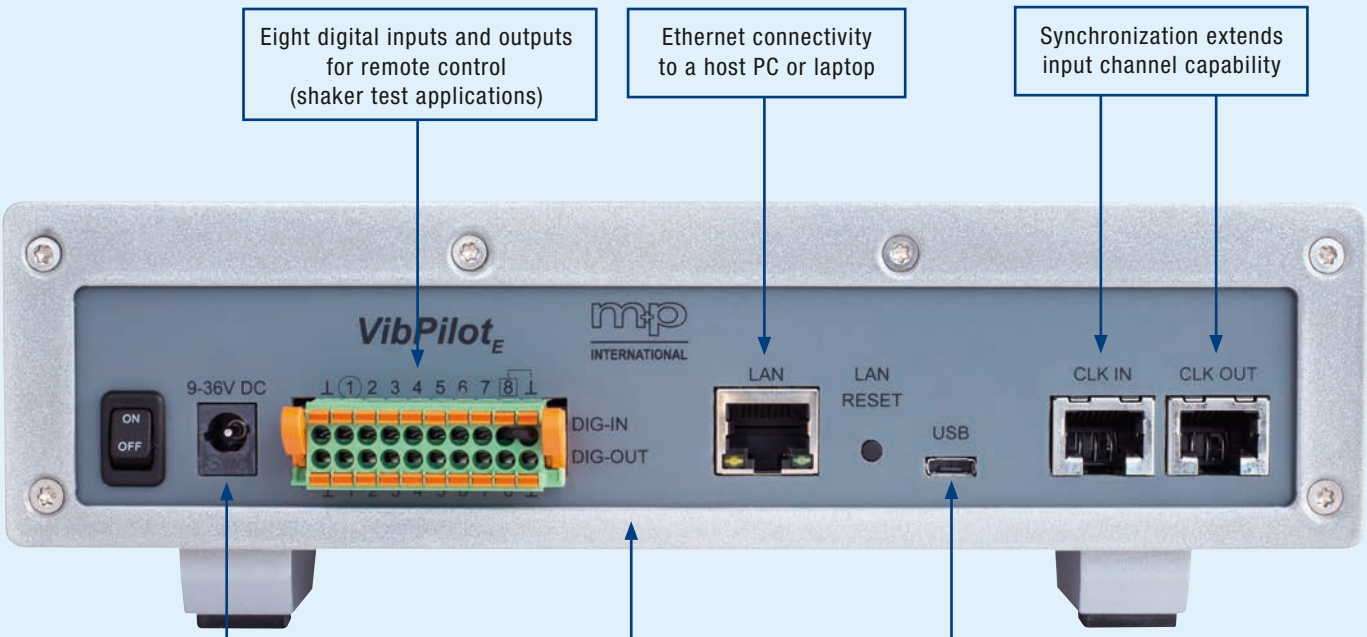
Two tacho inputs are included with 32-bit high-speed up/down counters for rotational vibration measurements or for use as COLA synch inputs for shaker sine reduction applications.

Digital Inputs/Outputs

Eight digital inputs and eight digital outputs enable engineers to directly execute control functions for combined environmental tests (climatic chamber control) or for parallel functional tests of the specimen. Individual tests can be easily combined in any complexity of nested loops.

Dynamic Signal Processors

Two 300 MHz floating-point dynamic signal processors in each m+p VibPilot pre-process the data, thus guaranteeing the high performance and short control cyles.



m+p international

Founded in Hannover, Germany in 1980, m+p international develops and manufactures test and measurement systems for vibration control, dynamic signal analysis, data acquisition, process monitoring and test stand engineering. Our product reputation and broad experience coupled with valuable user feedback have led to significant market share in numerous key industries worldwide.

The company has its headquarters in Hannover, Germany with sales/marketing subsidiaries in New Jersey (USA), England, France and China, along with representatives and agents in many countries.

Learn more on the full range of m+p international products and services and their applications. Select the m+p literature library on our website:
www.mpihome.com/en/literature-library.html

Germany
m+p international
Mess- und Rechnertechnik GmbH
Thurnithistraße 2
30519 Hannover
Phone: (+49) (0)511 856030
Fax: (+49) (0)511 8560310
sales.de@mpihome.com

USA
m+p international, inc.
271 Grove Avenue, Bldg. G
Verona, NJ 07044-1705
Phone: (+1) 973 239 3005
Fax: (+1) 973 239 2858
sales.na@mpihome.com

United Kingdom
m+p international (UK) Ltd
Mead House
Bentley, Hants
GU10 5HY
Phone: (+44) (0)1420 521222
Fax: (+44) (0)1420 521223
sales.uk@mpihome.com

France
m+p international Sarl
5, rue du Chant des Oiseaux
78360 Montesson
Phone: (+33) (0)130 157874
Fax: (+33) (0)139 769627
sales.fr@mpihome.com

China
Beijing Representative Office of m+p international
Room 1006, Jin Ma Office Building B Seat
Xue Qing Road No. 38
Hai Dian District, Beijing
Phone: (+86) 10 8283 8698
Fax: (+86) 10 8283 8998
sales.cn@mpihome.com

m+p VibControl, m+p Analyzer, m+p Coda, m+p VibPilot, m+p VibRunner and m+p VibMobile are products of m+p international.

All trademarks and registered trademarks are the property of their respective holders.

Specifications subject to change without notice.

dollenmeier
Sensoren, Messtechnik, Beratung

Ing. Büro Dollenmeier GmbH
Regensbergstrasse 16
CHF-8157 Dielsdorf

www.dollenmeier.ch
sales@dollenmeier.ch

Tel. +41(0)44 885 45 11
Fax +41(0)44 885 45 12

ISO 9001 CERTIFIED

m+p INTERNATIONAL

listens to customers ...

www.mpihome.com

980/12-16/3000