

## Product Datasheet - Technical Specifications



More information in our Web-Shop at ► [www.meilhaus.com](http://www.meilhaus.com) and in our download section.

### Your contact

Technical and commercial sales, price information,  
quotations, demo/test equipment, consulting:

Tel.: **+49 - 81 41 - 52 71-0**

FAX: **+49 - 81 41 - 52 71-129**

E-Mail: [sales@meilhaus.com](mailto:sales@meilhaus.com)

Downloads:

[www.meilhaus.com/en/infos/download.htm](http://www.meilhaus.com/en/infos/download.htm)

**Meilhaus Electronic GmbH** | Tel. **+49 - 81 41 - 52 71-0**  
Am Sonnenlicht 2 | Fax **+49 - 81 41 - 52 71-129**  
82239 Alling/Germany | E-Mail [sales@meilhaus.com](mailto:sales@meilhaus.com)

Mentioned company and product names may be registered trademarks of the respective companies. Prices in Euro plus VAT. Errors and omissions excepted.  
© Meilhaus Electronic.

[www.meilhaus.de](http://www.meilhaus.de)

## **Package contents**

- M530 series generator – 1pc
- USB cable – 1pc
- Plug in adapter – 1pc
- installation leaflet – 1pc
- CD with software and user's guide in pdf – 1pc

## Performance characteristics

### Outputs

|  |  |
|--|--|
| Number of channels   | 1  |
| Number of outputs  | 2, low and high level (L a H)  |
| Output attenuator  | Settable to 0 or -20dB on L output   |
| Max. output voltage, output L, no load                         | -4.5V to 4.5V (9Vpp) attenuator set to 0dB<br>-450mV to 450mV (900mVpp) attenuator set to -20 dB   |
| Max output voltage, output H no load                           | -25V to 25V (50Vpp)  |
| Recommended range of output voltage setting, output L, no load | 800mVpp to 9Vpp attenuator set to 0dB<br>80mVpp to 900mVpp attenuator set to -20 dB  |
| Recommended range of output voltage setting, output H, no load | 4.6Vpp to 50Vpp  |
| Output voltage setting step, output L, no load                 | < 2.5mV (attenuator set to 0dB)<br>< 250uV (attenuator set to -20 dB)  |
| Output voltage setting step, output H, no load                 | < 13mV   |
| Output voltage setting accuracy                                | Output L: +-2% from the actual value in recommended range up to 10 MHz.<br>Output H: +- 2.5% from actual value in recommended range up to 100 kHz<br>+5% from 100kHz to 200kHz |
| Output voltage shift range, output L, no load                  | +1.5V attenuator set to 0dB<br>+150mV attenuator set to -20 dB   |
| Output voltage shift range, output H, no load                  | +8V  |
| Shift setting accuracy, output L                               | +1.5% from whole range   |
| Shift setting accuracy, output H                               | +2% from whole range   |
| Output resistance, output L                                    | 50Ohm  |
| Output resistance, output H                                    | 600Ohm   |
| Output resistance accuracy, output L                           | +1.5% attenuator set to 0dB<br>+2%, -0.5%, attenuator set to -20 dB  |
| Output resistance accuracy, output H                           | +1.5%  |
| Filter   | Settable to 20MHz, 40MHz or off  |
| Output pulse edge length, output L                             | < 10ns, filter off   |
| Output pulse edge length, output H                             | < 2.5us  |
| Short circuit protection                                       | Unlimited  |

### Waveform generation

|                        |  |
|------------------------|--|
| Waveform memory length | 8192 samples in "standard" mode, maximally 16384 samples in „arbitrary“ mode |
|------------------------|--|

|                               |                               |
|-------------------------------|-------------------------------|
| Frequency setting step        | < 0.003% from actual value    |
| Frequency accuracy            | 0.01% from actual value       |
| Maximum output update rate    | 100 000 000 samples/s         |
| Output waveform period length | 2mHz to 50MHz *               |
| Modes of operation            | Periodic, single or triggered |

\* - The period consists of two points, when period length is 50MHz

## Synchro

|                                   |                      |
|-----------------------------------|----------------------|
| Trigger input                     | 3.3V CMOS compatible |
| Trigger input threshold voltage   | about 1.6V           |
| Trigger input maximum input range | -10V to +13V         |
| Trigger output                    | 3.3V CMOS compatible |

## Power

|                   |   |
|-------------------|---|
| Power sources     | - USB interface via USB cable<br>- In order to activate high voltage output (H), auxiliary 10V to 18VDC power supply is required (wall adaptor is the part of the package). |
| Power consumption | - max. 480mA from USB<br>- 1.2W to 2.25W from auxiliary power supply (depending on the output voltage and load of the high voltage output)                                  |

## Mechanical characteristics

|  |                   |
|--|-------------------|
| Dimensions with no feet and connectors | 165 x 111 x 35 mm |
| Dimensions with feet and connectors    | 182 x 111 x 39 mm |
| Weight                                 | 530 g             |