



IMBus* universal measuring bus

Universal interface between digital measuring devices or multi-point measuring instruments and PC with CAQ/QS programs. Suitable for use in industrial environments.

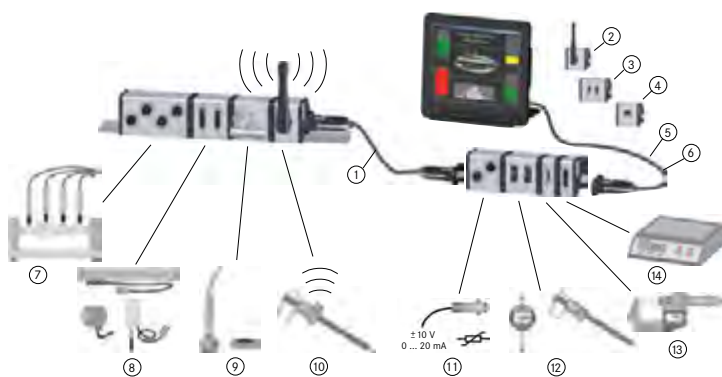
Properties:

- Powerful and flexible interface modules for electronic length-measuring probes and measuring instruments
- Modular measuring bus design: per PC, max. 8 measuring buses (devices), per measuring bus up to 64 connections, meaning up to 512 (8 x 64) measuring instruments can be connected
- Combination of several module groups in one measuring bus, length up to 1200 m (connected with bus extension cable) ability to connect several measuring instruments/stations to one measuring bus even if they are physically separate
- Automatic addressing of modules used in measuring bus (plug & play)
- High resolution and measuring accuracy of length measuring probe modules
- Connections to peripheral devices (e.g. PC): USB, RS232, LAN, WiFi, Profibus
- Additional modules for
 - further measuring instruments (e.g. incremental, analogue and pneumatic measuring instruments)
 - Control of program sequences
 - Power supply
- Easy module connection (RS485 bus interface)
- Can optionally be used as a table model or installed in top-hat rails
- IMB_Test software for system configuration and testing measurement value transmission

Options:

- IBREXDLL software for importing, displaying and evaluating measurement data in MS Excel, no. 39956 505
- ComGage software, for measurement and statistical process control in manufacturing,
- IBR-DDK.DLL software (device driver kit) for implementing the measuring buses in current Windows CAQ/QS programs
- Compact measuring computers Mecc and Meic for industrial applications

Technical details: All modules in robust AL housing, dimensions height x depth: 49.25 X 62 mm (width depends on module)



- 1 Max. 1200 m
- 2 Wi-Fi
- 3 Profibus
- 4 Ethernet
- 5 RS232
- 6 USB
- 7 Inductive sensor
- 8 Incremental
- 9 Air measurement
- 10 IBRit-rf1 radio modules
- 11 Analogue signals
- 12 Measuring instruments with Digimatic interface
- 13 Measuring instruments Opto RS232 interface
- 14 Measuring instruments with serial (RS232, RS422, ...) or parallel (binary, BCD, ...) interface



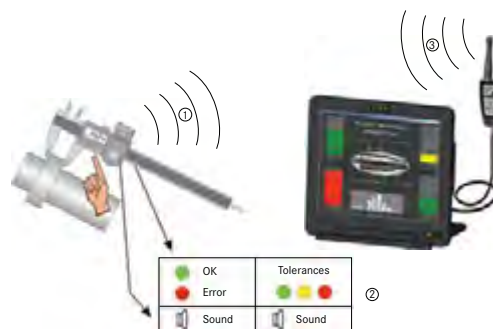
Wireless measurement transmission with IBR radio modules

Application:

The IBRit-RF1 radio module series is used for wireless data transmission from measuring instruments to PCs. It includes PC radio stations and measuring instrument radio modules. Up to 500 measuring instrument radio modules can be controlled by one PC radio station. The IBRit-rf1 radio module series offers absolute data security through double, independent checksum monitoring. The PC communicates wirelessly with the measuring instruments via the IBRit-rf1 PC radio stations. The measuring instrument communicates wirelessly with the PC via the IBRit-rf1 measuring instrument radio modules.

Product description and advantages:

- Easy to use
- Full data security
- Cost-effective
- Connects to all types of measuring instruments
- Transfer acknowledgement
- Compact design
- Large range
- Long battery life
- Efficient working
- CE & FCC approval
- Tolerance feedback
- Individually programmable
- 500 measuring instruments
- 500 PC remote transmission stations



① Data, ② Feedback, ③ Confirmation

➡ Further information, advice and quotations available on request. Please contact us.



TESA BPX44 interface

For wired measurement data transmission

Application:

For transmission of measurement data in combination with TESA 5-pin plug in line with DIN 45322.

Execution:

- Number of measurement instrument inputs: 4
- Can be extended to up to 64 measuring instrument inputs using a USB serial port
- Measuring ranges +/-: 200 µm, 500 µm, 2000 µm and 5000 µm

- Synchronisation time max. 1 ms
- Max. recording time 10 ms
- Housing dimensions (L x W x H) 172 mm x 155 mm x 55 mm

Advantage:

- Can be integrated in existing CAQ systems
- Compatible with interface TESA TWIN station

Delivery:

TESA interface boxes TESA BPX44, TIS software



BPX44



39828...

TESA interface box TESA BPX44

Ident. No.

400

Prod. Gr. 366

ATORN® connection cable

for measuring instruments with multiCOM interface

Application:

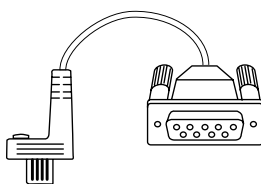
For wired data transfer from measuring instruments with multiCOM interfaces to e.g. PCs or interfaces with USB, RS232 or Digimatic interfaces

Technical data:

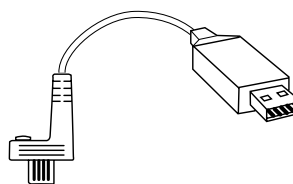
- Data communication: Unidirectional
- Cable length: 2 m
- Data button on cable: Yes



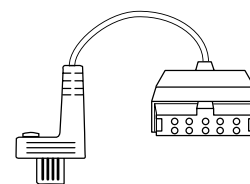
Ident. No. 010



Ident. No. 010



Ident. No. 020



Ident. No. 030

39855...

multiCOM data cable with RS232 interface

Ident. No.

010

39855...

multiCOM data cable with USB interface

Ident. No.

020

39855...

multiCOM data cable with DIGIMATIC interface

Ident. No.

030

Prod. Gr. 303



connection cable

For measuring devices with multiCOM interface with extended pinout

Application:

For wired data transfer from measuring devices with extended pinout.

Execution:

- multiCOM interface with extended pinout

Technical data:

- Cable length: 2 m
- Data button on cable: Yes



Ident. No. 025



Ident. No. 035

Data communication			Bidirectional	Unidirectional
39855...	multiCOM data cable with USB interface (with extended pinout)	Ident. No.	025	-
39855...	multiCOM data cable with Digimatic interface (with extended pinout)	Ident. No.	-	035

Prod. Gr. 305

TESA connection cable for measuring instruments with TESA TLC interface

Application:

For wired data transfer from measuring instruments with TLC interfaces to e.g. PCs or interfaces with USB or Digimatic interfaces

Technical data:

- Data communication: Bidirectional
- Cable length: 2 m



Ident. No. 210



Ident. No. 220

39852...	TESA TWIN data cable with USB interface	Ident. No.	210
39852...	TESA TWIN data cable with DIGIMATIC interface	Ident. No.	220

Prod. Gr. 366

TESA TLC - Bluetooth wireless transmitter suitable for radio receiver TESA-TWIN

Application:

for wireless transmission of measurement data in conjunction with a TESA USB receiver.

Execution:

- bidirectional communication
- max. receiver range 12 m
- degree of protection IP67



Advantage:

- small, compact design, can be integrated in the battery compartment or cable adapter

Notes:

the current version of the free TESA DATA VIEWER software used to transfer measured values to Excel, for example, can be found on the manufacturer's website at www.tesatechnology.com.



39852...	TLC - Bluetooth wireless transmitter	Ident. No.	240
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Prod. Gr. 366

TESA TESA adapter cable for TLC wireless transmitter suitable for measuring devices with RS232 or OptoRS232 interface

Application:

TESA adapter cable for TLC radio transmitter, for wireless transmission via Bluetooth in combination with a TESA radio transmitter.

Execution:

- Ident. No. 250: for measuring devices with OptoRS232 interface.

- Ident. No. 260: For measuring devices with RS232 interface.

Notes:
for matching Bluetooth radio transmitter see 39852240



Ident. No. 250



Ident. No. 260

OptoRS232 interface	RS232 interface
39852...	39852...
Ident. No.	Ident. No.
250	260

Prod. Gr. 366



TESA USB receiver for TESA wireless transmitter

for up to eight measuring instruments

Application:

for acquisition of measured data from measuring devices equipped with a TESA Bluetooth radio transmitter. up to eight measuring devices can be connected with a USB receiver.

Execution:

- USB receiver
- USB extension cable
- **Ident. No. 280:** starter kit, additionally includes Bluetooth radio transmitter



Ident. No. 270



Ident. No. 280

Set without Bluetooth radio transmitter	Set with Bluetooth radio transmitter
39852... Ident. No.	39852... Ident. No.
270 ●	280 ●

Prod. Gr. 366

Connection cable

For measuring instruments with opto RS232 interface

Application:

For wired data transfer from measuring instruments

with opto RS interfaces to e.g. PCs or interfaces with USB or RS232 interfaces

Data communication			Unidirectional	Bidirectional
39852...	Opto RS data cable with RS232 uni interface	Ident. No.	090 ●	-
39852...	Opto RS data cable with RS232 bi interface	Ident. No.	-	091 ●
39852...	Opto RS data cable with USB interface	Ident. No.	-	101 ●

Prod. Gr. 362



TESA Connection cable

For measuring instruments with PowerRS interface

Application:

For wired data transfer from measuring instruments with PowerRS interfaces to e.g. PCs or interfaces with RS232 interfaces

Notes:

Power supply via the RS232 interface

Technical data:

- Data communication: Bidirectional
- Cable length: 2 m

39852...	Power RS data cable with RS232 interface	Ident. No.	200 ●
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Prod. Gr. 362



sylvac Connection cable

For measuring instruments with proximity interfaces

Application:

For wired data transfer from measuring instruments with proximity interfaces to e.g. PCs or interfaces with USB or RS232 interfaces

Technical data:

- Data communication: Bidirectional
- Cable length: 3 m

39852...	Proximity data cable with USB interface	Ident. No.	105 ○
39852...	Proximity data cable with RS232 interface	Ident. No.	190 ●

Prod. Gr. 362





TESA Connection cable

for measuring instruments with RS232 interface

Application:

No. 35176: For wired data transfer from measuring instruments with RS232 interfaces to e.g. PCs or interfaces with RS232 interfaces

No. 39852: For wired data transfer from measuring instruments with RS232 interfaces to e.g. PCs or hubs with USB interfaces

Notes:

No. 35176: Serial data cable, straight through

No. 39852: Driver is provided on the supplied demo CD

Technical data:

- Cable length: 2 m



No. 35176



No. 39852

Data communication			Unidirectional	Bidirectional
39852...	RS232 data cable with USB interface	Ident. No.	102 ●	-
35176...	RS232 data cable with RS232 interface	Ident. No.	-	150 ○

Prod. Gr. 362



TESA Connection cable

For measuring instruments with 8-pin mini-DIN interfaces

Application:

For wired data transfer from measuring instruments with 8-pin Mini-DIN interfaces to e.g. PCs or interfaces with RS232 interfaces

Notes:

Compatible with TESATRONIC TT10 display unit and height measuring devices TESA Micro-Hite 350, 600

and 900 manual in versions 10, 11 and 12.

Technical data:

- Data communication: Bidirectional
- Cable length: 2 m



39828...	Mini-DIN data cable with RS232 interface	Ident. No.	170 ●
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Prod. Gr. 362



TESA Connection cable

For measuring instruments with 25-pin Sub-D interfaces

Application:

For wired data transfer from measuring instruments with 8-pin Mini-DIN interfaces to e.g. PCs or interfaces with 25-pin Sub-D interfaces

Notes:

Compatible with electronic dial gauges TESA DIGICO 1 and 2, see product number 33175 010 and 020

Technical data:

- Data communication: Bidirectional
- Cable length: 2 m



39828...	TESA special data cable with RS232 interface	Ident. No.	870 ○
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Prod. Gr. 362

BOBE Opto-USB-0 and RS232-USB-1 USB keyboard interfaces

For transmitting measured data via keyboard interface

Application:

For transferring measured values via keyboard interface, e.g. to Microsoft® Office applications such as EXCEL, WORD etc. For measuring instruments with serial interfaces connected to USB ports via keyboard interfaces.

Execution:

- Power supply via USB interface
- USB interface is detected as a keyboard
- Closing characters such as Enter or Tab can be set on the USB interface. These are automatically sent together with the data.
- Language, separator settings etc.
- Data transfer via data button on the measuring instrument or using a timer
- Timer function can be set from 0-99 seconds for the transmission of measured values within a specified time interval

Advantage:

- Cost-effective solution for transferring measured data
- No driver file needed for the USB interface

Delivery:

Ident. No. 210: USB interface with operating instructions

Ident. No. 220: USB interface, USB cable to PC, adapter for foot-operated switch, operating instructions

Notes:

Ident. No. 220: Bidirectional data cable required

Technical data:

- Data transmission type: USB



Ident. No. 210
Interface Opto-USB-0 with TESA CAL IP67 vernier calipers and MS Excel application



Interface RS232-USB-1

Interface input			-	1 x RS232
Suitable for			Measuring instruments with Opto-RS232 interface. No additional data cable is required.	One measuring instrument with serial interface. Bidirectional data cable is also required.
39870...	Interface opto USB 0	Ident. No.	210	-
39870...	Interface RS232 USB 1	Ident. No.	-	220

Prod. Gr. 395

BOBE Keyboard interface

For transferring measured values via keyboard interface

Application:

For transferring measured values via keyboard interface, e.g. to Microsoft® Office applications such as EXCEL, WORD etc. For measuring instruments with serial interfaces connected to USB ports via keyboard interfaces.

Execution:

- Power supply via USB interface
- USB interface is detected as a keyboard
- Closing characters such as Enter or Tab can be set on the USB interface. These are automatically sent together with the data.
- Language, separator settings etc.
- Data transfer via data button on the measuring instrument or using a timer
- Timer function can be set from 0-99 seconds for the transmission of measured values within a specified time interval

- Cascadable, allowing the measuring station to be extended at any time with additional T-boxes from the 30X USB series
- Measurements triggered via optionally available foot-operated switch

Advantage:

- Cost-effective solution for transferring measured data
- No driver file needed for the USB interface

Delivery:

T-Box 305 USB: includes connection cable, operating instructions

Technical data:

- Interface input: 2 x RS232 | 3 x DIGIMATIC
- Data transmission type: USB
- Suitable for: Multiple measuring instruments with serial or DIGIMATIC interface. Bidirectional data cables are also required.



T-Box 305-USB with examples of measuring devices that can be connected (max. 2x RS232)

39870...	Interface T-Box 305 USB	Ident. No.	305
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Prod. Gr. 395



MarCom Professional software version 5.1

facilitates recording of measurement data in MS Excel (from version 97)

Application:

For transmitting measurement data from measuring instruments with MultiCom or MarConnect data output and for measuring instruments with USB data cables. Imported measuring data can be freely assigned to columns, sheets or books.

Design:

- Over 100 measuring instruments with multiCOM interface and USB connecting cable can be connected.
- Additional connection of 2 measuring instruments with RS232C connecting cable.
- Flexible and convenient transfer of measured values with either the „Data“ button on the measuring instrument and data cable or via PC keyboard, timer, foot switch on USB interface or remote operation.

- Multiple foot-operated switches can be connected via USB. Assignment to measuring instruments can be freely defined depending on the measuring task. Configurable measuring cycles (e.g. transfer of all measured values, or following operation of the foot-operated switch)
- Cyclic measured value request via timer
- Transmission of measured values to separate columns (rows), sheets or books according to the measuring instrument

Free download at:

www.mahr.com/marcom

System requirements:

MS Windows 7/MS Windows 8/USB interface version 1.1 or higher/at least 10 MB free hard drive space/MS Excel version 97 or higher



TESA DataDirect software

For measuring instruments with RS232 interface

Application:

For data acquisition from measuring instruments with an RS232 interface. The DataDirect software has a serial input and output driver. It is thereby possible to transfer measurement data to spreadsheets, databases and statistics modules as well as Microsoft Windows applications such as Excel, Word, etc. Create your own individual test reports and

document your measurement results.

Execution:

- Driver library for TESA-measuring devices
- Additional text input options such as date, time, measuring instrument
- Real-time display of measured values
- Data export to CSV file, ASCII commands



39855... | Ident. No. 500
Prod. Gr. 366



TESA StatExpress software

Contains the TESA DataDirect software

Application:

For measurement data acquisition from measuring instruments to PC (DATA-DIRECT) and for creating measurement programs with statistics and SPC (STAT-EXPRESS)

Execution:

- DataDirect software included

- Driver library for TESA-measuring devices
- Additional text input options such as date, time, measuring instrument
- Real-time display of measured values
- Data import and export of CSV files
- XR control cards
- Complete report with statistics display
- Report creation in PDF or HTML format



39855... | Ident. No. 510
Prod. Gr. 366