



Connectivity

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TESA
TECHNOLOGY

Towards a connected company...

Thanks to advancements in the field of information technology, robotics, and more, digital technologies are being increasingly utilized in workshops around the world. Even though some companies continue to employ the traditional pen-and-paper method to ensure traceability of the parts they produce, the boundary between the physical and digital worlds is gradually fading.

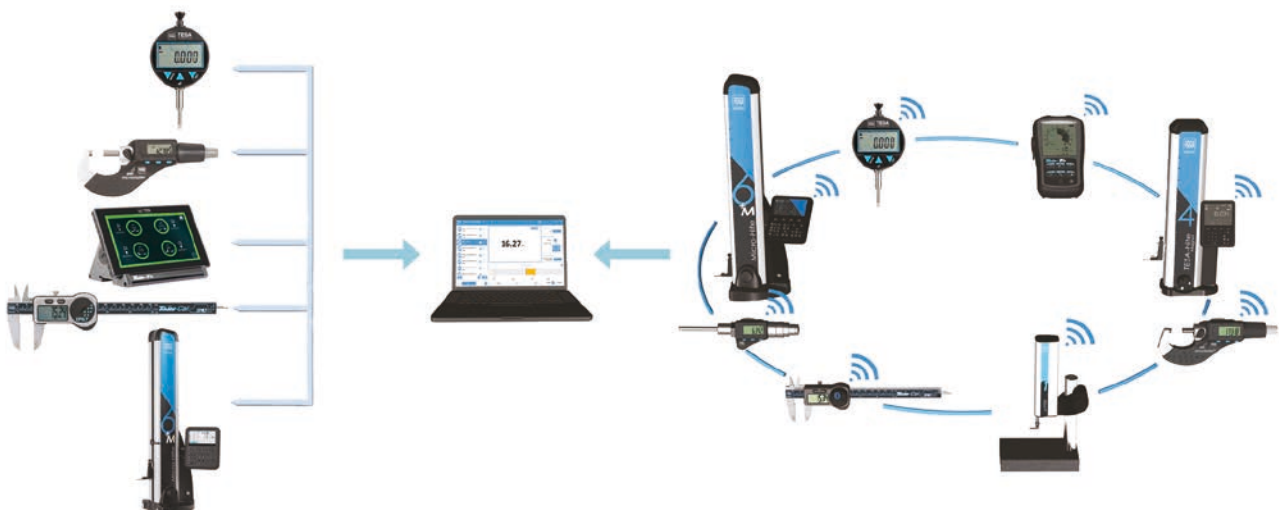
In the current context of Industry 4.0, competitiveness and flexibility go hand in hand with the digitalization of businesses. Productivity gains, cost reduction, and product and process improvement are generally discussed. Consequently, real-time monitoring and control of one's production become relatively important.

In this context, instrument connectivity becomes an indispensable feature. Connecting measurement instruments to a computer opens up powerful possibilities (reports, statistical analysis, etc.) and clearly fulfills data management expectations for both small enterprises and larger companies.



A wide range of possibilities

In this chapter, you will find several options for connecting TESA instruments to a peripheral device and receiving the data for further processing. To achieve this, TESA not only offers various types of connections between the measuring instrument and the computer, but also powerful and comprehensive data management software solutions.



Connectivity

Send your data to a free software, DATA-VIEWER

Data acquisition has never been easier! TESA digital instruments with Bluetooth® and USB connection are automatically recognized by the software, and the measured values are displayed in a user-friendly environment. Once the data is loaded into the TESA DATA-VIEWER software, it can be exported to other software such as STAT-EXPRESS, Q-DAS, or Excel, and customized to fit your own format.



A appreciated modular system

With the flexibility provided by the TLC (TESA Link Connector) connector, the issue of data transmission is no longer a source of stress during the initial purchase of the instrument. Indeed, by externalizing the technology related to data management into this accessory, TESA enables updating its instruments at any time, whether for cable-based or wireless management.



The TLC cap comes in two versions: with cable or wireless transmission

Family	Model		Designation	Connector type
Calipers	Universal models		TWIN-CAL TWIN-CAL IP67	TLC
	Workshop models		TWIN-CAL IP67	TLC
	Workshop models with knife-edge internal jaws		TWIN-CAL IP67	TLC
	Depth models with short cut measuring face		TWIN-CAL IP67	TLC
	Depth models with fixed hook(s)		TWIN-CAL IP67	TLC
	Depth models with rotary stop plate		TWIN-CAL IP67	TLC
	Depth model with steel measuring tip		TWIN-CAL IP67	TLC
Micrometers	External models		MICROMASTER RS	Opto-RS232
	External model with fine inserts		MICROMASTER RS	Opto-RS232
	Internal models		IMICRO RS	Opto-RS232
Dial gauges			DIALTRONIC	Inductive USB
Display units	Portable display unit with 1 probe input		TWIN-T10	TLC
	Double display unit with 2 TESA probe inputs		TWIN-T20	TLC, RS232
	Double display unit with 2 Heidenhain probe inputs		TWIN-T20 nano	TLC, RS232
Height gauges	1D manual		TESA-HITE MAGNA TESA-HITE	TLC
	2D manual		MICRO-HITE	TLC
	2D motorised		MICRO-HITE+M	TLC
Measuring station	2D motorised		μ-HITE	TLC
Clinometers			CLINOBEVEL 1	USB, RS-485
			CLINOBEVEL 3	USB, RS-485
Roughness gauges	Portable		RUGOSURF 20	Micro-USB
	Ultra-compact		TWIN-SURF	USB C
	Roughness and profile measurement		RUGOSURF 90G	Micro-USB

Connectivity

TLC-BLE emitter



Range	12 m (depending on environment)
Degree of protection	IP67
Weight	7,2 g
Power supply	CR2032 button battery
Operating temperature	10 ÷ 40 °C

Article number	Designation
04760183	TLC-BLE Bluetooth® emitter + USB dongle receiver + 1,5 m extension cable set
04760184	TLC-BLE Bluetooth® emitter
04760185	USB receiver + 1,5 m extension cable

TLC-BLE adapters



04760178



04760179

Article number	Designation
04760178	Opto-RS232 to TLC adapter
04760179	RS232 to TLC adapter

TLC connection



04760181



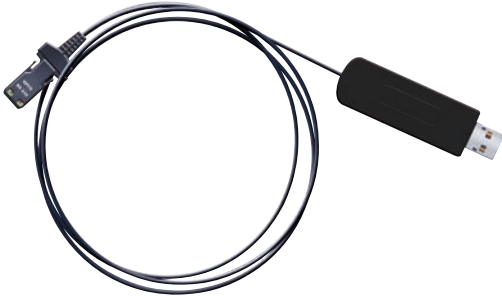
04760182

Degree of protection IP67

Article number	Designation	Length m	Connector (instrument side)	Connector (PC or system side)
04760181	TLC-USB cable, 2 m	2	TLC	USB
04760182	TLC-DIGIMATIC cable, 2 m	2	TLC	Ansley 10p/f

Wireless connection

Opto connection



04761062

Article number	Designation	Length m	Connector (instrument side)	Connector (PC or system side)
04761062	Opto-RS232 to USB cable, duplex, 2 m	2	Opto-RS232	USB
04761049	Opto-RS232 to Sub-D 9p/f cable, duplex, 2 m	2	Opto-RS232	Sub-D 9p/f
04761027	Opto-RS232 cable, without connector, 2 m	2	Opto-RS232	Without connector

USB connection



Article number	Designation	Length m	Connector (instrument side)	Connector (PC or system side)
04760099	USB to micro-USB cable	2	Micro-USB	USB
06960062	USB cable, RUGOSOFT 10G/90G to computer	1,8		USB
04760151	USB A to USB B cable, 1,8 m	1,8	USB A	USB B
04760152	USB A to USB C cable, 1 m	1	USB C	USB A
04760160	Cable inductive to USB, 3 m	3	Inductive	USB
04760161	Cable power to USB, 3 m	3	Power	USB
04760162	Cable power (90 degrees) to USB, 3 m	3	Power (90 degrees)	USB

Sub-D connection



04761052

Article number	Designation	Length m	Connector (instrument side)	Connector (PC or system side)
04761063	Sub-D 9p/m to USB cable, 2 m	2	Sub-D 9p/m	USB
04761052	Sub-D 9p/f to Sub-D 9p/m cable, 2 m	2	Sub-D 9p/m	Sub-D 9p/f
04761073	Sub-D 9p/m to USB adapter	0,1	Sub-D 9p/m	USB
03969007	Sub-D 9p/f to Sub-D 9p/f cable, 3 m	3	Sub-D 9p/f	Sub-D 9p/f

Cable connection

Power supplies and cables



04761054

Article number	Designation	Length m
06960046	Power supply 100 ÷ 240 V, 50 ÷ 60 Hz, 12 V, 400 ÷ 600 mAh	
00760258	Adapter + 14 V charger (cables not included)	
04761054	Power supply 100 ÷ 240 Vac, 50 ÷ 60 Hz, 6,6 Vdc, 750 mAh	
04760153	Power supply 100 ÷ 240 V, 50 ÷ 60 Hz	
04761055	Power cable, UE	1,8
04761056	Power cable, US	1,8
04761072	Power cable, UK, 1,8 m	1,8
04460016	TWIN-T20 power supply + UE, UK, US and CH cables	1,2
02160038	Power supply 80 ÷ 240 Vac, 50 ÷ 60 Hz	

Batteries



00560030

Article number	Designation
00760256	Rechargeable battery block
06960063	Battery NiMH 8,4V, 170 mAh, format PP3

Printer for MICRO-HITE range

Together with instruments in the MICRO-HITE range as well as the TESA μ -HITE measuring station, data can be automatically and directly sent to a printer connected to the control panel.

As the printer is optional, it can be connected to an instrument in this range at any time of its use.



00760235

Article number	Designation
00760235	USB printer

Printer for TWIN-SURF roughness gauge



06960090

Article number	Designation
06960090	Bluetooth® printer

Thermal paper



00760250

Article number	Designation
00760250	4x thermal paper, 58 mm, for TWIN-SURF and MICRO-HITE printers