HEXAGON

HxGN HybridMeasurement

Product presentation

2025-10-10 Customer Solutions Wetzlar

Integration of TESA measuring probes into the PC-DMIS measuring routine

Aim of the software:

Reduction of the cycle time by integrating a flexible number of probes into the clamping device. The deviations from the "master part" should be able to be used in the PC-DMIS measurement routine as if the measurement had been made with the coordinate measuring machine.

TESATRONIC TT100

TT100 + TESA-MODUL

TESA-MODUL IO-8

Automation from the PLC to TESA display

- Go to next sequence
- send data
- Set to Zero
- Calibration

Input mode

Pin 1 to 8

Power supply 12-30 VDC

Assignment according to function allocation
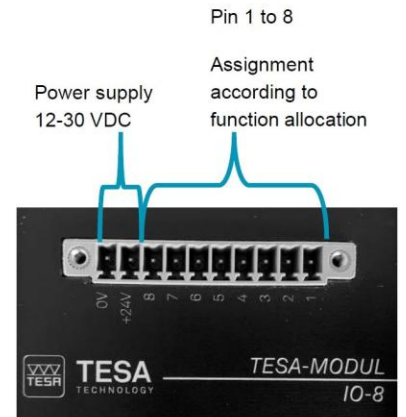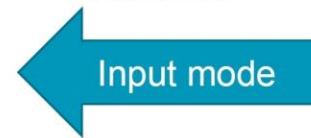
Automation from TESA display to PLC

- Sequence OK
- Measurement OK
- Classification

Output mode
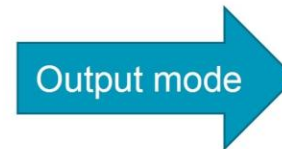
- Voltage 24 VDC
- Max 30 mA

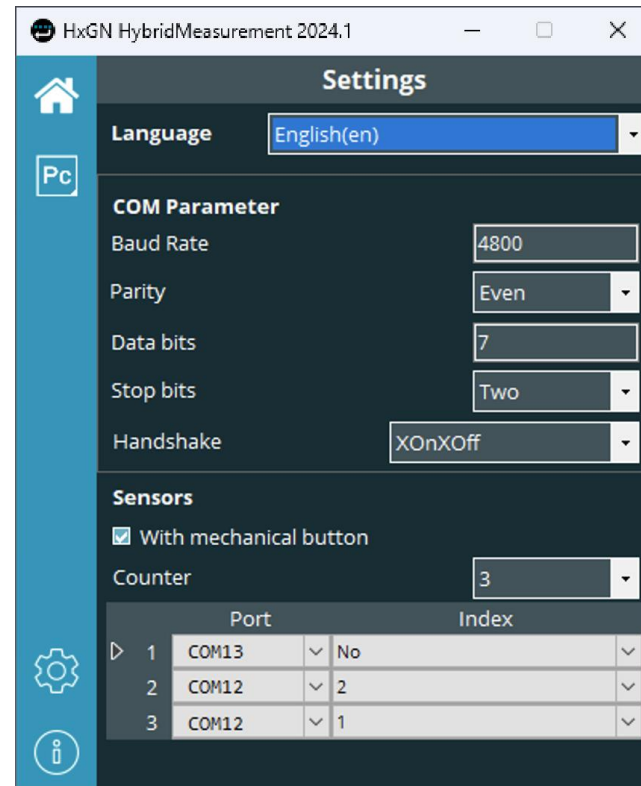HEXAGON

Integration of TESA measuring probes into the PC-DMIS measuring routine

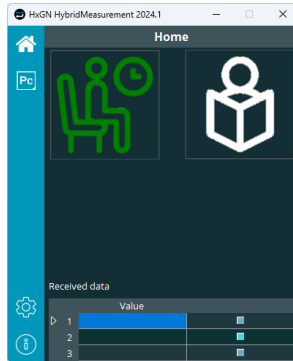Connection Settings

The connection of the probes and/or display can be done in the software UI. The used port is detected automatically.

Integration of TESA probes into a PC-DMIS measurement routine

- Two operating modes are supported:
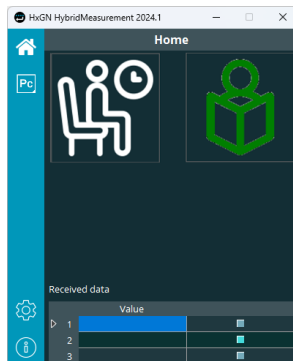
  - Operator triggers the measurement on the device
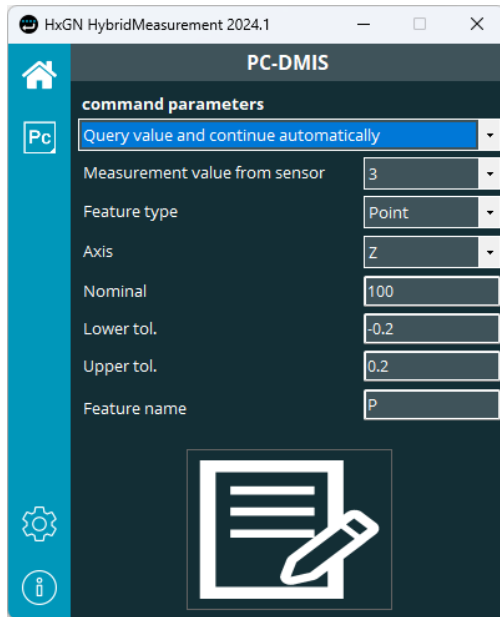

Handwitch, Jack

Footswitch, Jack

  - Measurement routine reads the data automatically

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Integration of TESA measuring probes into the PC-DMIS measuring routine

- Necessary commands are inserted into the measurement routine in a dialog-based manner.
- Each measured value is available in PC-DMIS as a fully-fledged element and can therefore be used for further operations.
- A dimension command is automatically inserted.
- The measured value of the sensor is regarded as a deviation and offset against the specified nominal value to form the actual measured value.

```
        EXTERNALCOMMAND/NO_DISPLAY, WAIT ; "C:\Program Files\HxGN_SmartFixture\HxGN_SmartFixture.exe P_Z_1:A:1"
P_Z_1      =GENERIC/POINT,DEPENDENT,CARTESIAN,$
        NOM/XYZ,<0,0,100>,$
        MEAS/XYZ,<0,0,100>,$
        NOM/IJK,<0,0,1>,$
        MEAS/IJK,<0,0,1>
DIM DIM_P_Z_1= LOCATION OF POINT P_Z_1   UNITS=MM ,$
GRAPH=OFF   TEXT=OFF   MULT=10.00   OUTPUT=BOTH   HALF ANGLE=NO
AX    NOMINAL       +TOL        -TOL       MEAS        DEV       OUTTOL
Z     100.000      0.100      -0.100     100.000      0.000       0.000 ---------#----------
END OF DIMENSION DIM_P_Z_1
```

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Integration of TESA Micro-Hite and TESA caliper

- TESA height gauges and TESA calipers can also be connected to PC-DMIS via HxGN HybridMeasurement.

Verbindungskabel TLC-USB für Instrumente mit TLC-Anschluss

Have we piqued your interest?

Simply download the software from our server and apply for a non-binding demo license.

https://downloads.ms.hexagonmi.com/PC-DMIS_Solution_Modules/HxGN HybridMeasurement

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