



HxGN HybridMeasurement

Product presentation

2024-09-09 Customer Solutions Wetzlar

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

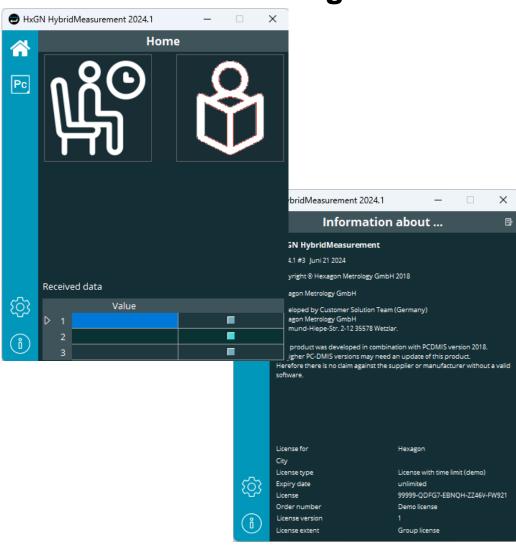
Aim of the software:

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.



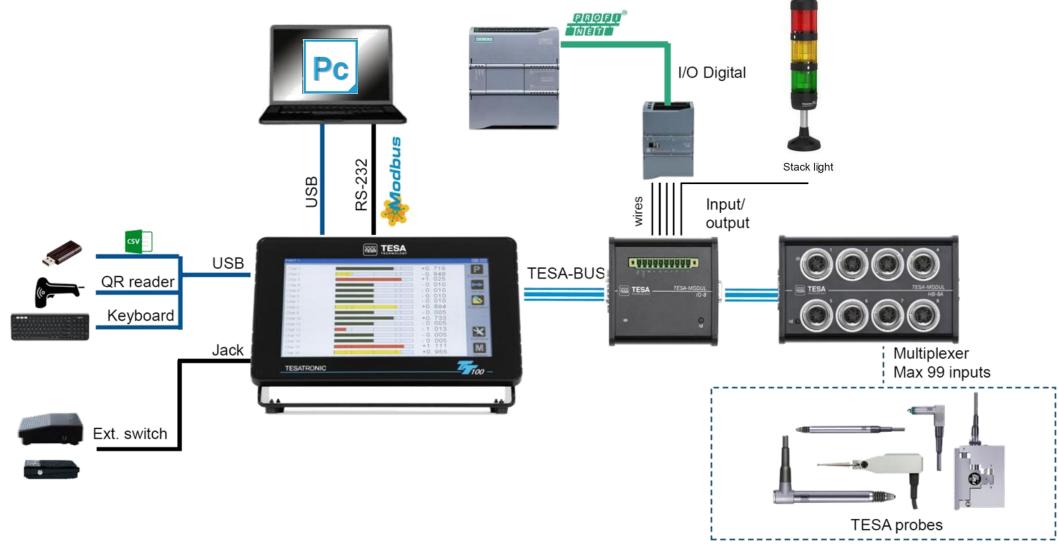


TESATRONIC TT100





TT100 + TESA-MODUL





TESA-MODUL IO-8

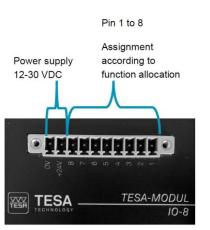


Automation from the PLC to TESA display

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

Input mode





Automation from TESA display to PLC

- Sequence OK
- Measurement OK
- Classification

Output mode



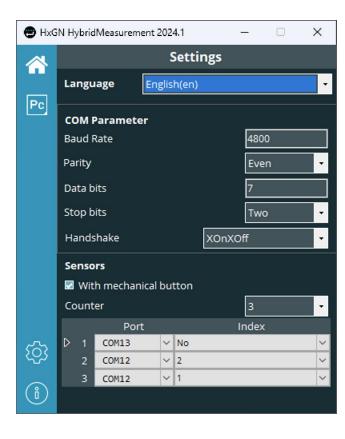
- Voltage 24 VDC
- Max 30 mA



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





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



- Necessary commands are inserted into the measurement routine in a dialogbased 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 .$
          TEXT=OFF MULT=10.00 OUTPUT=BOTH HALF ANGLE=NO
      NOMINAL
                                          MEAS
                                                      DEV
                                                              OUTTOL
                    +TOL
                               -TOL
                    0.100
                              -0.100
                                        100,000
                                                     0.000
                                                                0.000 -----#----
       100.000
END OF DIMENSION DIM_P_Z_1
```



Integration of TESA Micro-Hite and TESA caliper

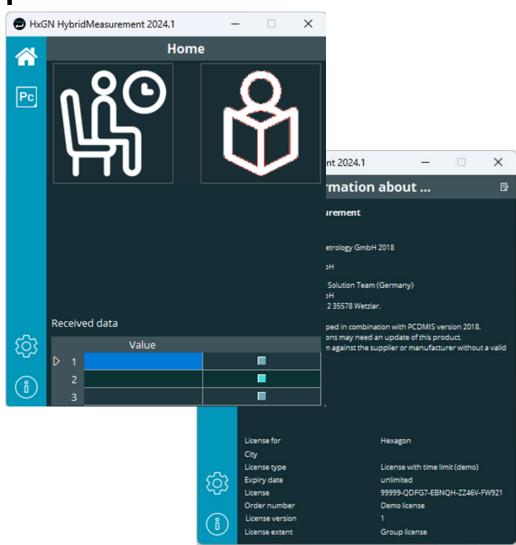
 TESA height gauges and TESA calipers can also be connected to PC-DMIS via HxGN HybridMeasurement.







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://ftp.hexmet.de/CustomerSolutions/HxGN_HybridMeasurement

