

## DUO

# THE PREMIUM AFFORDABLE DISPLAY UNIT







Indicators and electronic display units

**Duo**<sup>™</sup> is a premium 4.3" electronic display unit allowing to perform simple measurement applications intuitively and rapidly.

As small as a smartphone, Duo is a powerful and ultra compact gauge computer.

Designed in response to customer needs, it is a "something in-between" display unit that provides premium features at an affordable price.



Displacement Sensors



Bore Gauges



Forks and Ring Gauges



Bench Gauges



Indicators and Electronic Display Units



Interface Boxes for Data Acquisition



Software





Duo is well-suited for simple manual applications when only a few measurements are needed on the shop floor at any given time. Featuring two sensor input channels, it can simultaneously display up to four measurements. The system is easy to configure and provides clear visualization of measurement status.

Duo is designed to work with Marposs LVDT and HBT manual gauges, such as bore gauges M1 and M1 Star, snap gauges M3 Star, ring gauges M4 and M4 Star, and RedCrown/RedCrown2 displacement sensors with a measuring range up to ± 10 mm. It is the perfect ensemble with Duo Air™, an analog A/E converter box that provides one or two LVDT output signals, offering a premium solution for air measuring devices. It can also connect HBT sensors from Tesa.

Data collected can be stored internally in the Micro SD memory providing powerful memory capacity, exported through the USB port, the RS232 port or the optional Fieldbus port.

Duo software guarantees a friendly and easy to use operator interface. The true flat touch-screen allows to program and acquire measurements without any additional input/command device. A data trigger can be made also with the external signal of a footswitch or with a data request from the host PC, through a serial or fieldbus protocol.

Easier cycle management through 2 IN (Start/Stop, zeroing), 2 OUT (part good or scrap) and one separate input for a footswitch.

Designed also for portable use, it can be powered by an external battery (at least 16000 mAh to guarantee one working shift).



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#### **TECHNICAL SPECIFICATIONS**

Main hardware characteristics	
Case	Robust industrial Aluminum case
Protection	IP54 on front panel; IP40 on rear panel
Touch screen	Capacitive, true flat
Storage media	Internal 4 GB Micro SD memory or removable USB memory device
LCD display tape	4.3" color TFT
Ethernet/Fieldbus	Available types are Ethernet/IP, Profibus, Profinet
Usb ports	1 x type B (only for power supply) + 1 x type A
Serial port	1 x RS232C + 1 x RS485
Bench-top support	Reclinable
Power supply	5V 1.4A
Dimension	130 x 95 x 50 mm (5.12" x 3.74" x 1.97")
Weight	1kg
Operating temperature	5 to 45 °C (41 to 113 °F)
Storage temperature	-20 to 70 °C (-4 to 158 °F)

#### Product **features**

#### Single measurement



Multiple measurement

#### Home



Part programs list

- Measurement capability up to 4 characteristics.
- Part counters.
- Dynamic acquisitions [Max, min, Range, Range/2, Average].
- Multiple zero setting modes (Zeroing / Sensitivity adj. / Zeroing & Sens. adj.).
- Multiple measurement display with numeric and graphical layout.
- Acquisition command through external signal (footswitch) or touch-screen.
- Measurement data transmission through Fieldbus (option), serial protocols or serial keyboard emulation.
- Remote data storage and export through removable USB memory device.
- Data storage format: .CSV (Microsoft® Excel Comma Separated Values), .DFQ (K-fields).
- Multi-language support for: English, Italian, German, French, Spanish, Portuguese, Swedish, Romanian, Dutch, Polish, Magyar, Czech, Russian, Taiwanese, Turkish, Japanese, Chinese, Korean.
- Programming interface designed to be used with touchscreen.
- Configuration Backup-Restore-Update by USB memory devices.
- Password protected multi-user management.

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#### **HOW TO ORDER**

Description	Order code
DUO Basic for LVDT/HBT/Tesa HBT sensors	B830DU0D001
DUO Bus for LVDT/HBT/Tesa HBT sensors, with Profibus module	B830DU0D043
DUO Bus for LVDT/HBT/Tesa HBT sensors, with Profinet module	B830DU0D044
DUO Bus for LVDT/HBT/Tesa HBT sensors, with Ethernet/IP module	B830DU0D045
Footswitch with 2 m cable for data triggering function	B6131000110

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### **Application** examples

