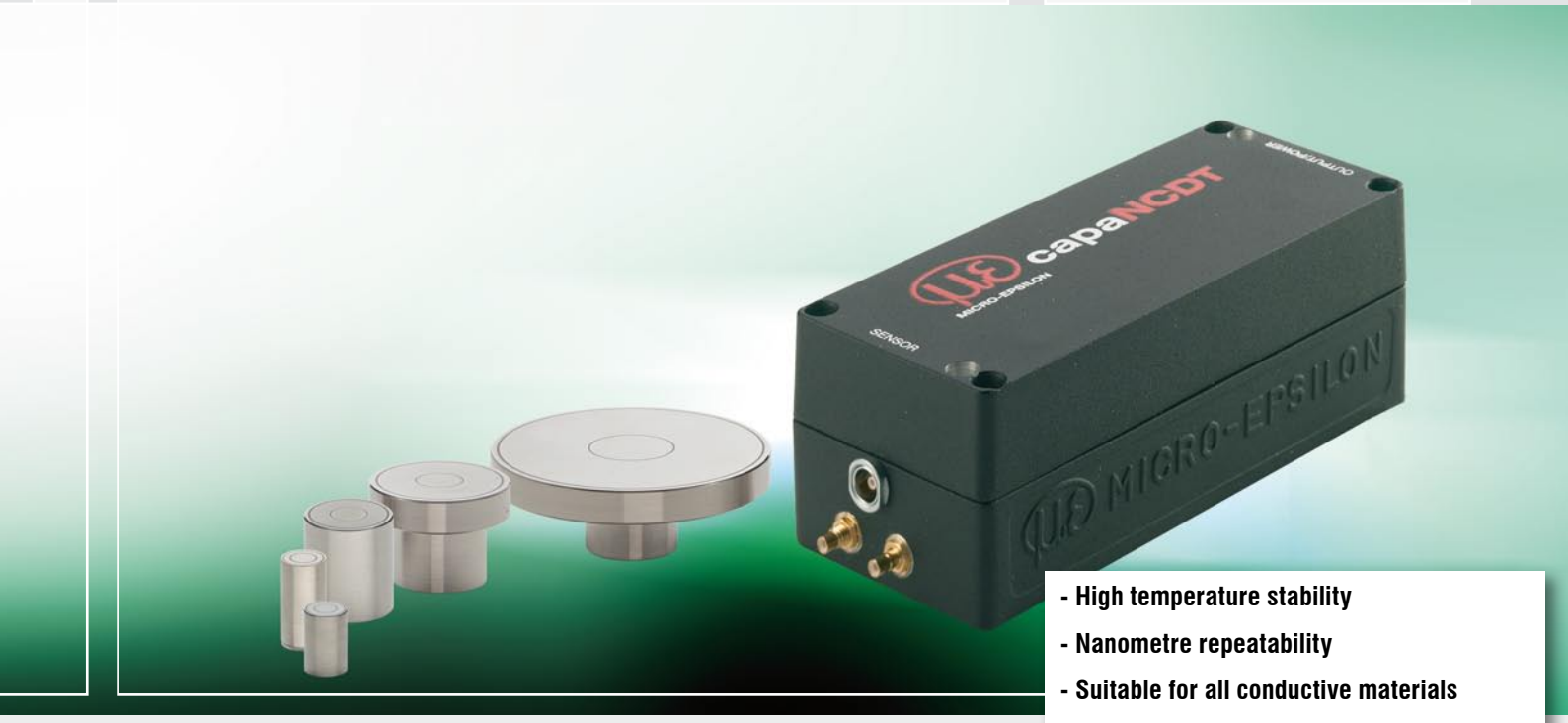
MICRO-EPSILON

More Precision.

capaNCDT

High resolution capacitive displacement sensors and systems.



- **High temperature stability**
- **Nanometre repeatability**
- **Suitable for all conductive materials**
- **Can be synchronised for non-grounded targets**
- **24V (9 – 36V) standard power supply for industrial applications**
- **Suitable for practically all sensors**

System structure

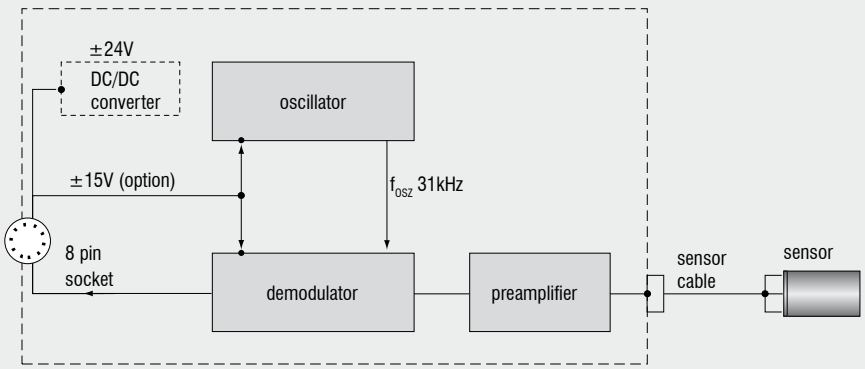
capaNCDT 6100 is a compact single-channel system consisting of the capacitive displacement sensor, the sensor cable and the controller. Using the 2-point linearisation, the user can also carry out compensation on-site which takes account of the individual installation conditions. With the possible power supply between 9 – 36 V, the system can also be operated in passenger cars or trucks. The capaNCDT 6100 provides an outstanding price/performance ratio and is very well suited for common measuring tasks. This system provides high flexibility as it can be operated with practically all capaNCDT sensors.

A measuring system consists of:
- capacitive displacement sensor
- sensor cable
- controller

Accessories:
- power supply cable
- power supply
- synchronisation cable

Block diagram

Power supply: 24 VDC, (9-36 VDC) ±15 VDC
Output: 0-10 V

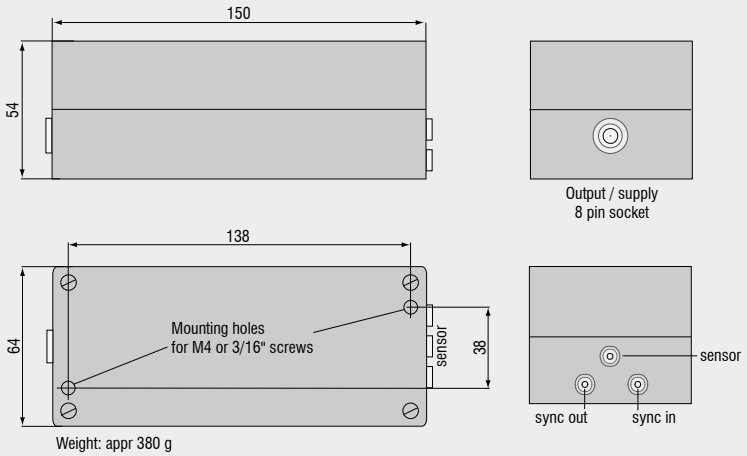


Controller type	DT6100
Resolution static	0.01 % FSO
Resolution dynamic	0.015 % FSO (2 kHz)
Bandwidth	2 kHz
Bandwidth adjustable	10 Hz / 2 kHz
Linearity	±0.3 % FSO (all sensors interchangeable without calibration) Option LC: ±0.1 % FSO (tuned to one sensor)
Max. sensitivity	±0.1 % FSO
Long term stability	≤0.05% FSO / month
Synchronous operation	yes
Insulator measurement	no
Temperature stability	±0.03 % FSO / °C
Temperature range (operation)	+10 … +60 °C
Temperature range (storage)	-10 … +75 °C
Supply	24 VDC / 85 mA (9...36 VDC)
	optional ±15 VDC / 85 mA (9...36 VDC)
Output	0…10 V (resistance min. 1,2 kΩ / capacitance max. 1 nF)
	optional: 4…20 mA (load max. 400 Ω)
Suitable for sensors	all sensors exept CS005

Options

2982001	Option DT6100, I current output 4 - 20 mA
2982005	Option DT6100 power supply ±15 V DC
2982006	EMR2C DT6100 extended measuring range (factor 2)
2982007	LC option DT6100
4105012.01	DT6100(01) single-channel controller, 2 m sensor cable length
4105012.02	DT6100(02) single-channel controller, 3 m sensor cable length
2982031	Option DT6100 Ethernet port for configuration and data output

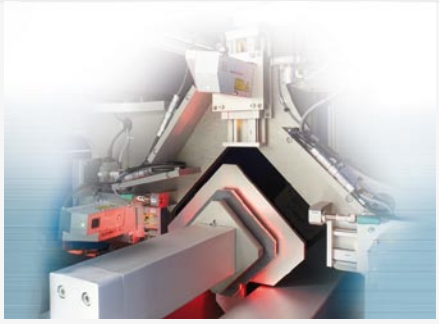
capaNCDT 6100 controller



High performance sensors made by Micro-Epsilon

Sensors and systems for displacement, position and dimension
Eddy current sensors
Optical and laser sensors
Capacitive sensors
Inductive sensors
Draw-wire sensors
Optical micrometers
2D/3D profile sensors
Image processing

Sensors and measurement devices for non-contact temperature sensors
Online instruments
Handheld devices
Thermal imager



Measuring systems for quality control
for plastic and film
for tire and rubber
for web material
for automotive components
for glass

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