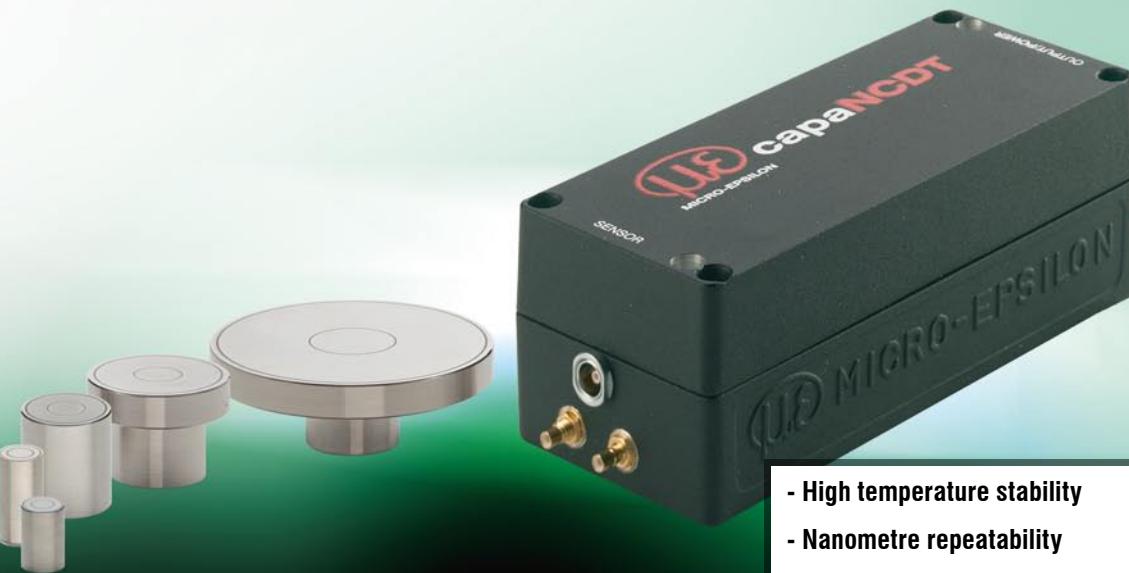


## Compact single channel system for precise measurements

## capaNCDT 6100



### 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.

- 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

### A measuring system consists of:

- capacitive displacement sensor
- sensor cable
- controller

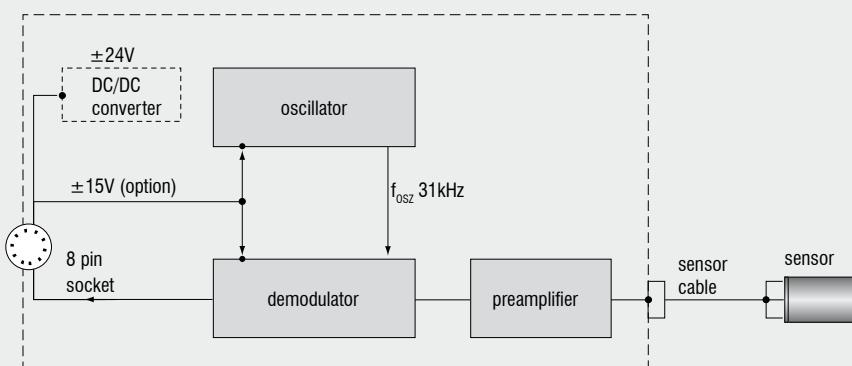
### Accessories:

- power supply cable
- power supply
- synchronisation cable

### Block diagram

Power supply: 24 VDC, (9-36 VDC)  $\pm 15$  VDC

Output: 0-10 V



<b>Controller type</b>	<b>DT6100</b>
Resolution static	0.01 % FSO
Resolution dynamic	0.015 % FSO (2kHz)
Bandwidth	2kHz
Bandwidth adjustable	10Hz / 2kHz
Linearity	±0.3 % FSO (all sensors interchangeable without calibration) Option LC: ±0.1 % FSO (tuned to one sensor)
Max. sensitivity deviation	±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 / 85mA (9...36 VDC) optional ±15 VDC / 85mA (9...36 VDC)
Output	0...10 V (resistance min. 1,2kΩ / capacitance max. 1 nF) optional: 4...20mA (load max. 400Ω)
Suitable for sensors	all sensors except 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

