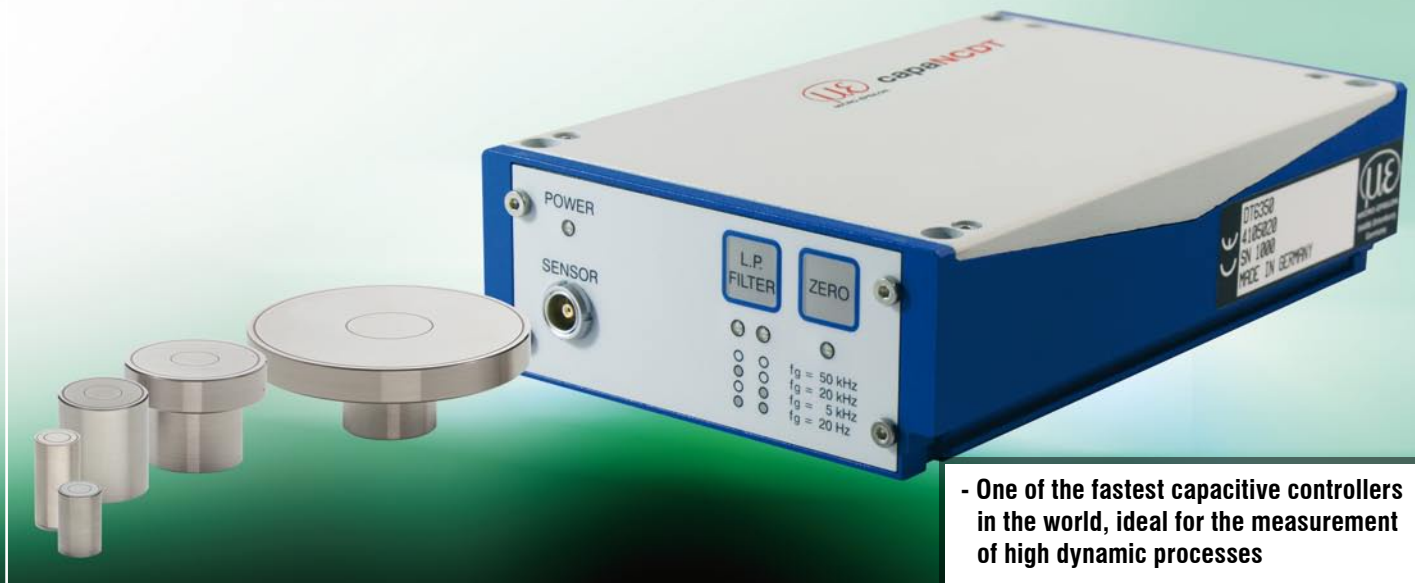


## Single channel system for dynamic measurements

capaNCDT 6350



- One of the fastest capacitive controllers in the world, ideal for the measurement of high dynamic processes
- Bandwidth 50kHz
- High functionality due to integrated DSP
- High zero point stability & accuracy
- Unmatched temperature stability
- Simple measuring range change (50 / 100 / 200 %) using DIP switch
- Selectable cable length (0.5 / 1 / 2m) without recalibration

### System structure

capaNCDT 6350 is a single-channel measurement system with modular designed signal conditioning electronics installed in an aluminium housing. The sensor operates using a high power DSP (Digital Signal Processor) and achieves up to 50kHz (-3dB) bandwidth at the analogue output. The capaNCDT 6350 series is used for demanding measurement tasks and can be used with nearly all capaNCDT sensors.

The system can be adjusted to suit particular target geometries using special tuning.

### A measuring system consists of:

- capacitive displacement sensor
- sensor cable
- signal conditioning electronics

### Accessories:

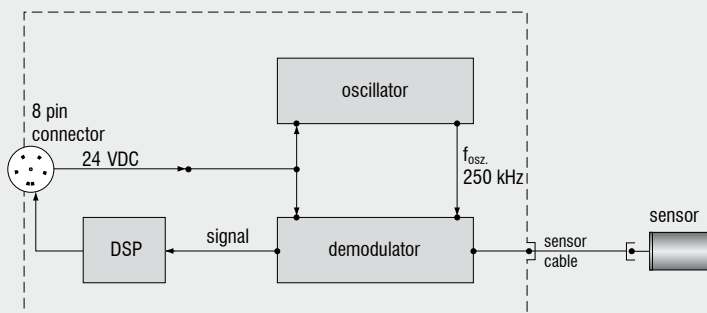
- power supply cable and signal output cable
- power supply
- synchronisation cable

### Block diagram

Controller DT 6350

Power supply: 24 VDC

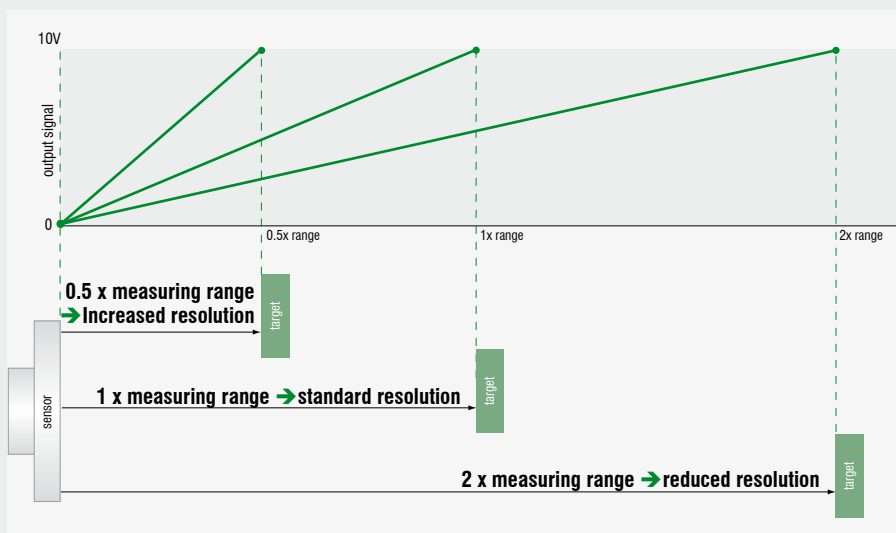
Output: 0-10 V



<b>Controller type</b>	<b>DT6350</b>
Resolution static	0.005 % FSO
Resolution dynamic	0.1 % FSO (50kHz)
Bandwidth	50kHz
Bandwidth adjustable	20Hz / 5kHz / 20kHz / 50kHz
Linearity	±0.3 % FSO
Max. sensitivity deviation	±0.2 % FSO
Long term stability	≤0.02 % FSO / month
Synchronous operation	yes
Insulator measurement	no
Temperature stability	±0.01 % FSO / °C
Temperature range (operation)	+10 ... +50°C
Temperature range (storage)	-10 ... +75°C
Supply	24VDC (9...30V) / 5.5W optional: ±15 VDC
Output	0...10V (max. 10 mA short circuit proof) optional: 4...20 mA / 0...20mA
Suitable for sensors	all sensors except CS005 and CS08
Sensor cable standard	0.5m; 1m; 2m
Sensor cable (matched)	with fixed assignment: 3m up to 100 % FSO 4m up to 50 % FSO

4105020.01 DT6350(01) single-channel controller with current output

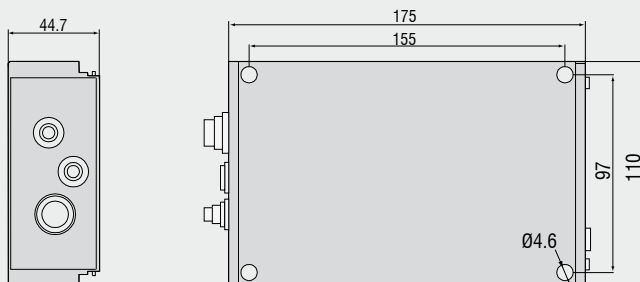
8010022 special tuning DT6350 for special sensors,  
round targets and sensor cables up to 4m



### Measuring Range Change

The standard measuring range of the sensor can be adjusted using DIP switches in the controller. If the measuring range is halved for the complete output voltage, the resolution increases. The resolution is reduced correspondingly if the measuring range is doubled.

### Controller



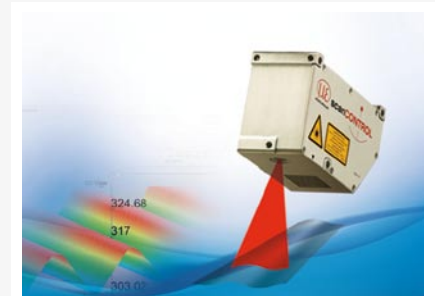
## High performance sensors made by Micro-Epsilon



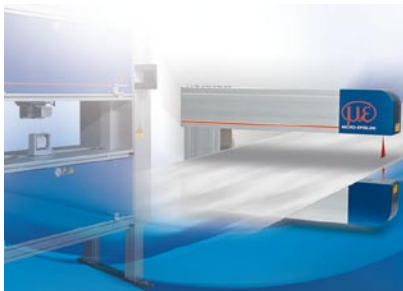
Sensors and systems for displacement and position



Sensors and measurement devices for non-contact temperature measurement



2D/3D profile sensors (laser scanner)



Measurement and inspection systems for quality assurance



Optical micrometers and optical fibers



Color recognition sensors and LED analyzers