

# Digital non-glass pH sensor Tophit CPS441D

Memosens ISFET electrode for the chemical, life sciences and food industries



More information and current pricing:

[www.de.endress.com/CPS441D](http://www.de.endress.com/CPS441D)

## Benefits:

- Unbreakable for highest product safety
- Resistant to poisoning thanks to constant refilling of KCl bridge electrolyte and separate reference lead
- Suitable for sterilization
- Low maintenance thanks to long calibration intervals
- Maximum process safety through non-contact inductive signal transmission
- Enables predictive maintenance due to storage of sensor and process-specific data
- Reduced operating costs due to minimized process downtime and extended sensor lifetime

## Specs at a glance

- **Measurement range** pH 0-14
- **Process temperature** -15°C ... 135°C (5°F - 275°F)
- **Process pressure** max. 10bar/100°C (145 psi/212°F)

**Field of application:** Tophit CPS441D is the digital high performer for media with low conductivity or high organic solvents content. Designed for fast response, it accurately measures even in fast-changing medium compositions. Its unbreakable shaft ensures best safety of your products. Thanks to Memosens digital technology, CPS441D combines maximum process and data integrity with simple operation. It resists corrosion and moisture, enables lab calibration and facilitates predictive maintenance.

## Features and specifications

pH

**Measuring principle**

ISFET

**Application**

- Special applications with high requirements with regard to accuracy and speed.- non-glass, break-proof- Low temperatures- Rapidly changing composition of media.- highly clogging media.- Low conductivities

**Characteristic**

Ion sensitive field effect transistor (Isfet)-Technology.- Overhead installation- rapid response at low temperature.- lower amount of maintenance required than with glass.- 3A

**Measurement range**

pH 0-14

**Measuring principle**

- Ceramic diaphragm.- Liquid lead

**Design**

All shaft lengths with temperature sensor

**Material**

Peek / metal oxide / Ceramic / EPDM

**Dimension**

Diameter : 12mm (0.47 inch) Shaft length : 120,225,360,425mm  
(4.72/8.86/14.2/16.7 inch)

**Process temperature**

-15°C ... 135°C  
(5°F - 275°F)

**Process pressure**

max. 10bar/100°C (145 psi/212°F)

**Temperature sensor**

Optional with integrated Pt1000

pH

**Ex certification**

ATEX

FM

---

**Connection**

Contactless, inductive, digitale connection head with Memosens-Technology

---

**Ingres protection**

IP68

---

More information [www.de.endress.com/CPS441D](http://www.de.endress.com/CPS441D)