

# Analog non-glass pH sensor Tophit CPS441

ISFET electrode for the chemical, life sciences  
and food industries



## 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

## Specs at a glance

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

More information and current pricing:

[www.at.endress.com/CPS441](http://www.at.endress.com/CPS441)

**Field of application:** Tophit CPS441 is the analog high performer for media with low conductivity or a high content of organic solvents. Designed for fast response, it accurately measures even in fast-changing medium compositions. Its unbreakable shaft ensures absolute safety of your products.

## 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

pH

**Characteristic**

- Ion sensitive field effect transistor (ISFET) technology - overhead installation - rapid response at low temperatures - 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: 12 mm (0.47 inch)  
Shaft lengths: 120, 225, 360, 425 mm  
(4.72/8.86/14.2/16.7 inch)

**Process temperature**

-15°C ... 135°C  
(5°F - 275°F)

**Process pressure**

max. 10 bar/100°C (145 psi/212°F)

**Temperature sensor**

Optional with integrated Pt1000

**Ex certification**

ATEX  
FM

**Connection**

TOP68 connection head

pH

**Ingres protection**

IP68

---

**Additional certifications**

EHEDG, 3A

---

More information [www.at.endress.com/CPS441](http://www.at.endress.com/CPS441)