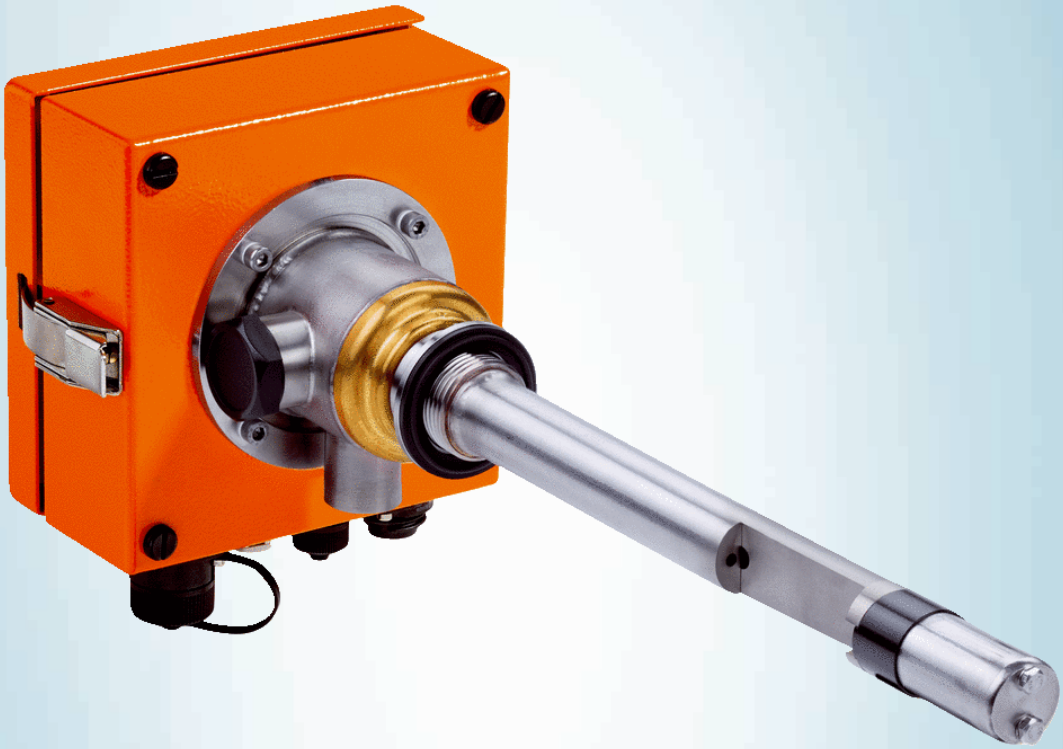
Product data sheet



# DHSP30-T2VBTNNLMNNXXS

## DUSTHUNTER SP30

**DUST MEASURING DEVICES**

SICK
Sensor Intelligence.



## Ordering information

| Type | Part no. |
|---|---|
| DHSP30-T2VBTNNLMNNXXS | 1077737 |

Our regional sales organization will help you to select the optimum device configuration.

Other models and accessories ➜ www.sick.com/DUSTHUNTER_SP30

## Detailed technical data

### Technical specifications

| | |
|---|---|
| **Measured values** | Scattered light intensity, dust concentration (after gravimetric comparison measurement) |
| **Measurement principles** | Scattered light forward |
| **Spectral range** | 640 nm ... 660 nm<br>Laser, protection class 2, power < 1 mW |
| **Measuring ranges** | |
| Scattered light intensity | 0 ... 7.5 SI / 0 ... 3,000 SI<br>Measuring ranges freely selectable; nine measuring ranges pre-configured (0 ... 7.5/15/45/75/150/225/375/1,000/3,000 SI) |
| **Response time ($t_{90}$)** | 0.1 s ... 600 s<br>Freely adjustable via SOPAS ET software |
| **Accuracy** | ± 2 %<br>Of measuring range full scale |
| **Process temperature** | –40 °C ... +220 °C |
| **Process pressure** | |
| With external purge air unit: | –50 hPa ... 30 hPa |
| With instrument air (provided by the customer): | –50 hPa ... 100 hPa |
| **Process gas humidity** | Non-condensing |
| **Duct diameter** | ≥ 0.15 m |
| **Ambient temperature** | –40 °C ... +60 °C |
| **Conformities** | TUEV type-examination |
| **Electrical safety** | CE |
| **Enclosure rating** | IP65 |
| **Analog outputs** | 1 output:<br>0/4 ... 20 mA, 750 Ω<br>Electrically isolated |

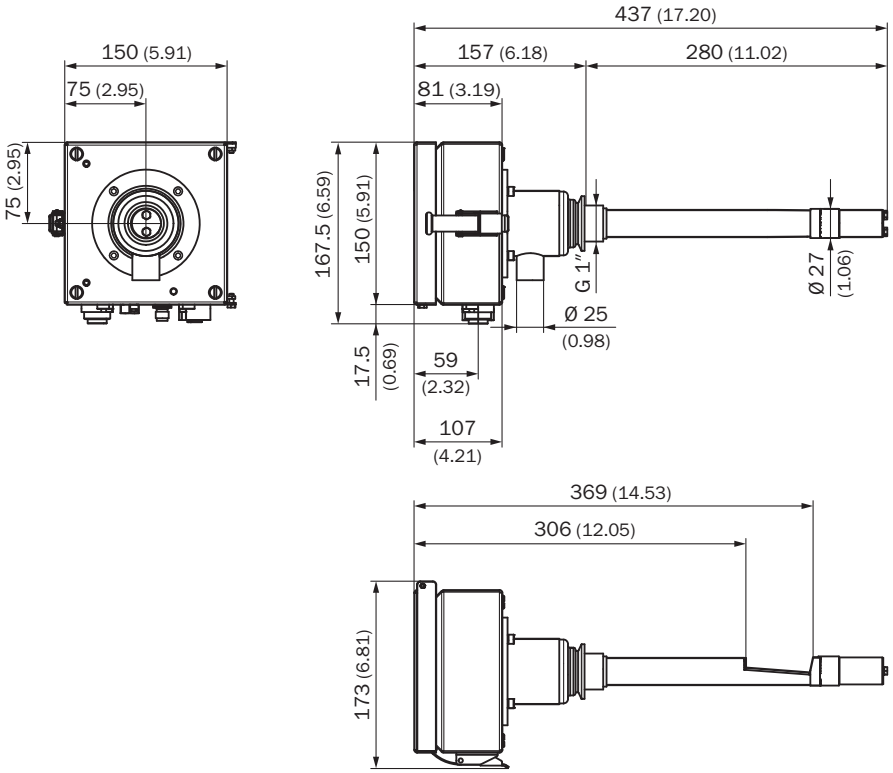
| | |
|---|---|
| **Digital outputs** | 3 relay contacts:<br>48 V, 1 A<br>For status signals |
| **Digital inputs** | 4 inputs:<br>For external maintenance switch, automated operational check, linearity measurement, calibration curve switching, or filter monitoring |
| **Serial** | ✓ |
| Type of fieldbus integration | RTU RS-485 |
| Function | For connection of a MCU control unit or as service interface |
| **Modbus** | ✓ |
| Type of fieldbus integration | RTU RS-485 |
| **Model** | Without integrated purge air unit |
| **Dimensions (W x H x D)** | 173 mm x 167.5 mm x 437 mm (for details see dimensional drawings) |
| **Nominal length** | 280 mm |
| **Weight** | ≤ 2.7 kg |
| **Mounting** | Mounting flange, Tri-Clamp |
| **Energy supply** | |
| Voltage | 24 V DC |
| Power consumption | ≤ 4 W |
| **Test functions** | Automatic self-test (linearity, drift, aging)<br>Manual linearity test with reference filter |
| **Options** | MCU control unit<br>External purge air unit |

## Classifications

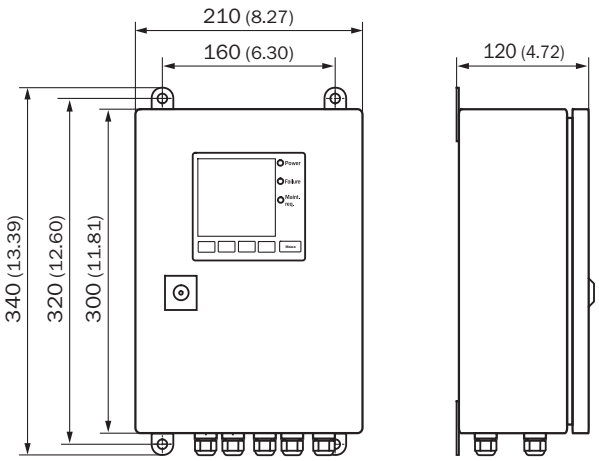
| | |
|---|---|
| **ECLASS 5.0** | 27150306 |
| **ECLASS 5.1.4** | 27150306 |
| **ECLASS 6.0** | 27150306 |
| **ECLASS 6.2** | 27150306 |
| **ECLASS 7.0** | 27150306 |
| **ECLASS 8.0** | 27150306 |
| **ECLASS 8.1** | 27150306 |
| **ECLASS 9.0** | 27150306 |
| **ECLASS 10.0** | 27150306 |
| **ECLASS 11.0** | 27150306 |
| **ECLASS 12.0** | 27150306 |
| **ETIM 5.0** | EC001190 |
| **ETIM 6.0** | EC001190 |
| **ETIM 7.0** | EC001190 |
| **ETIM 8.0** | EC001190 |
| **UNSPSC 16.0901** | 41115406 |

## Dimensional drawing (Dimensions in mm (inch))

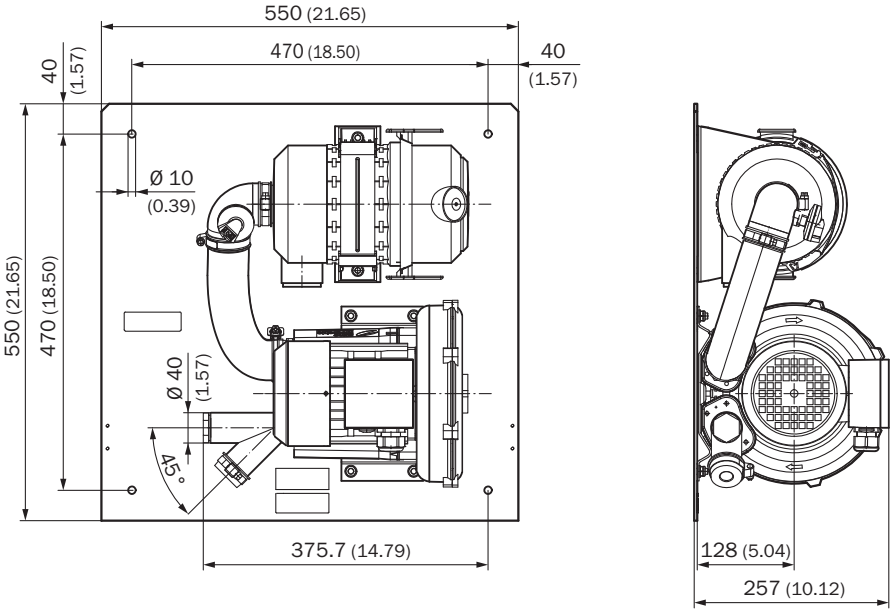
Sender/receiver unit DHSP30, Tri-Clamp, nominal length = 280 mm




MCU-N control unit; wall-mounting enclosure, compact version (for non-hazardous areas only)



SLV4-2 purge air unit, 2BH1300



# SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

**For us, that is “Sensor Intelligence.”**

# WORLDWIDE PRESENCE:

Contacts and other locations –www.sick.com