

## IQ8Quad-ST - Self-Test series of detectors

- Fully patented automated Self-Test function of optical and thermal sensors
- Ability to test across multiple panels and loops simultaneously
- Anti-masking function to detect covered detectors
- Integrated Bluetooth interface to localize the detector
- Real-time information allowing one-man inspection via CLSS App
- Fully digitised maintenance, inspection functions and reports
- Automated process to return detectors to a clean air condition
- Complete self-monitoring and automated diagnostics
- Short circuit and interruption tolerant



Schematic illustration

### The innovation

The new IQ8Quad ST detector generation with integrated self-test module combines the latest detection technology with automated testing and maintenance of point-type fire detectors by physically generating smoke and heat within the detector to test the integrated sensors (optical and thermal).

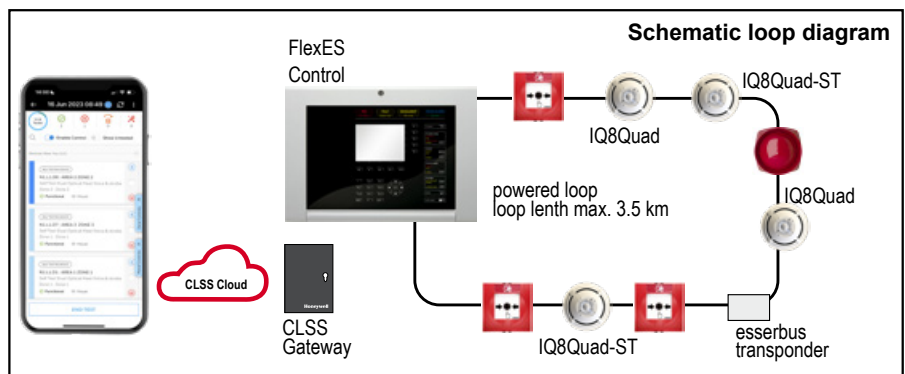
### Seamless installation and upgrade

A self-test module and a Bluetooth beaconing function have now been integrated into the proven design of the IQ8Quad detector family, allowing test, service and maintenance activities to be fully digitalized and automated, for maintenance measures according to European CEN/TS 54-14 and national standards as e.g. DIN 14675 and DIN 0833-2.

Replacing an existing fire detector with the new IQ8Quad ST detector with self-test function is easy and convenient. There is no need to replace or rewire the base as the existing standard detector base is fully compatible. Project design, spacing and installation height restrictions of IQ8Quad ST detectors are identical to standard detectors, also system limits per control panel or loop remain the same.

### The Self-Test function

Each detector uses patented self-test technology that automatically applies small amounts of test aerosol and heat to the sensor inside the detector to physically test the operation of the optical and heat sensors. In addition, anti-masking technology automatically tests the detector's smoke inlets and outlets to ensure they are clear and unobstructed. This quickly identifies detectors that have been inadvertently or otherwise obscured. During the walk-through visual inspection, the technician having a clear view of each self-test device can quickly verify or update device data as part of the intelligent inspection process using the Connected Life Safety Service (CLSS) App. Integrated Bluetooth beaconing further simplifies device management, allowing technicians via mobile phones to easily identify individual devices quickly finding any possible labelling, location mistakes and access detailed information on device type, settings and service information.



### Proven fire detector options with built-in self-test capability

**TD:** thermal detector for intelligent detection of fixed or rate-of-rise heat alarms.

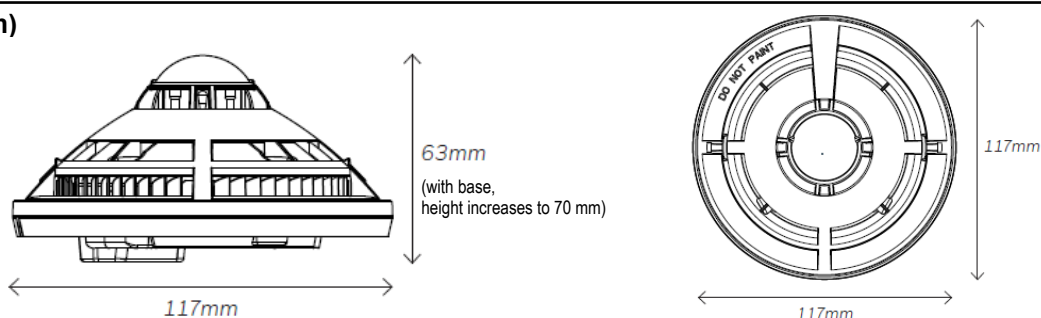
**O:** optical detector for intelligent, reliable smoke detection.

**OT:** optical-thermal multisensor detector for intelligent, reliable smoke and heat detection.

**OT<sup>blue</sup>:** optical-thermal detector with UV sensor for earliest detection of high-energy fires offering highest sensitivity for detection of smallest smoke particles.

**O<sup>2</sup>T:** dual optical-thermal detector for reliable early fire detection with highest immunity to false alarms using proven two-angle smoke detection.

## Dimensions (mm)



## Technical Data

Type	TD	O	OT	O <sup>2</sup> T	OT <sup>blue</sup>
Part No.	802271-ST	802371-ST	802373-ST	802374-ST	802375-ST
Quiescent current @ 19 V DC	50 µA	70 µA	75 µA	80 µA	75 µA
Quiescent current @ FACP <sub>Accu</sub>	0,09 mA @ 27,5 V / 0,11 mA @ 42 V	0,11 mA @ 27,5 V / 0,13 mA @ 42 V	0,11 mA @ 27,5 V / 0,13 mA @ 42 V	0,23 mA @ 27,5 V / 0,33 mA @ 42 V	0,11 mA @ 27,5 V / 0,13 mA @ 42 V
Ambient temperature	-20 °C ... 50 °C	-20 °C ... 72 °C	-20 °C ... 50 °C	-20 °C ... 65 °C	-20 °C ... 50 °C
Weight	approx. 86 g	approx. 121 g	approx. 122 g	approx. 122 g	approx. 122 g
VdS No.	G225003	G225002	G225004	G225006	G225005
Detector specification	EN 54-5 A1R, EN 54-17	EN 54-7, EN 54-17	EN 54-7, EN 54-5 A2, EN 54-17, EN 54-29	EN 54-7, EN 54-5 B, EN 54-17, EN 54-29	EN 54-7, EN 54-5 A2, EN 54-17, EN 54-29

## General technical data

Operating voltage	9,2 ... 42,4 V DC; 14 ... 42,4 V DC (EN 54-17); 34 V DC ... 42,4 (Self-Test)
Storage temperature	-25 °C ... 65 °C
Min. Ambient temperature Self-Test	0 °C (smoke)
Air humidity	≤ 95% (non-condensing)
Integrated loop isolator	yes
Type of protection	IP 21 with base IP 42 with base + option 805570 IP 43 with base + option 805572.50/805573
Material	ABS
Color	white, similar RAL 9010*
Dimensions	Ø 117 x H: 63 mm (w/o base) Ø 117 x H: 70 mm (with base)

\*Can also be painted in special colors (RAL colors) on request.

## Order information

	Part No.
TD Rate-of-rise heat detector IQ8Quad-ST	802271-ST
O Optical smoke detector IQ8Quad-ST	802371-ST
OT Multisensor optical & heat detector IQ8Quad-ST	802373-ST
O <sup>2</sup> T Multisensor optical & heat detector IQ8Quad-ST	802374-ST
OT <sup>blue</sup> Multisensor optical & heat detector IQ8Quad-ST	802375-ST
Standard detector base for IQ8Quad	805590
Detector base with relay contact for IQ8Quad	805591
Detector cover for IQ8Quad ST with built-in alarm sounder (50 pcs)	805589ST
Detector removal tool	805580
Label plate for detector base IQ8Quad (10 pcs)	805576
Base cover for IQ8Quad (50 pcs)	805587
IQ8Quad detector heating element	259529
EMC shield for IQ8Quad, ES Detect detector base (10 pcs)	805560
IP 43 moisture-proof sm base	805572.50