ESSER
by Honeywell

IQ8Quad-ST – Self-Test Detector with Integrated Alarm Device

- Patented, fully automated self-test function for smoke and heat detection
- Simultaneous testing across multiple fire alarm control panels and loops
- Anti-masking technology detects covered or obstructed detectors
- Integrated Bluetooth interface for easy detector location
- Real-time information enables single-person inspections via the CLSS app
- Fully digital maintenance, inspection and reporting
- Automatic detector cleaning followed by automatic return to normal operation
- Continuous self-monitoring and diagnostics
- Tolerant to short circuits and open circuits
- Compliant with VdS 3860



Schematic overview of the self-test function

THE INNOVATION

The new IQ8Quad ST detector generation combines advanced detection technology with a patented, fully automated self-test function for point-type fire detectors.

An integrated module generates smoke and heat, allowing the detector to automatically test the functionality of both its optical and heat sensors.

This verifies the functionality of the smoke or heat detector without the need for manual testing.

Integrated anti-masking technology also checks the detector's smoke entry and exit points to ensure they are clear and unobstructed. This makes it easier to quickly identify detectors that have been accidentally covered or otherwise blocked.

During a visual inspection, technicians with a clear line of sight to each self-test detector can quickly review or update device information using the Connected Life Safety Services (CLSS) app as part of the digital inspection process.

Integrated Bluetooth connectivity further simplifies device management by allowing technicians to identify individual detectors using a mobile device. This helps locate devices quickly, identify potential labelling or location errors, and access detailed information such as device type, settings and service data.

SEAMLESS INSTALLATION AND UPGRADES

The proven design of the IQ8Quad detector family now incorporates a self-test module and Bluetooth connectivity. This enables testing, servicing and maintenance activities to be fully digitalized and automated in accordance with the European standard CEN/TS 54-14, as well as national fire safety standards DIN 14675 and DIN 0833-2 in Germany and ÖNORM F3070 and TRVB 123 S in Austria.

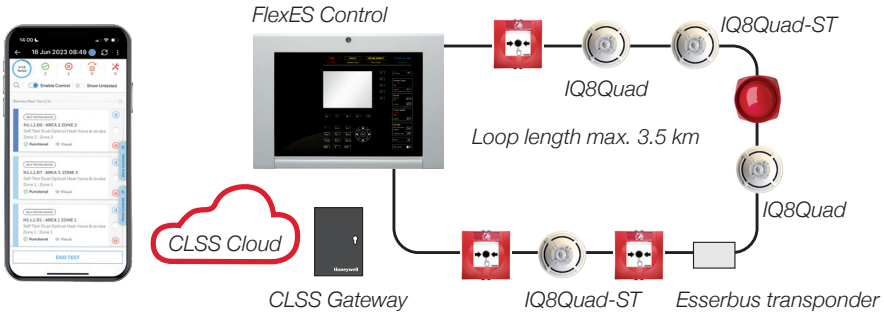
Upgrading an existing fire detector to the new IQ8Quad ST detector with self-test functionality is simple and straightforward. There is no need to replace or rewire the detector base, as the existing standard base is fully compatible.

Planning requirements, detector spacing and installation height restrictions remain the same as for standard IQ8Quad detectors. Existing system capacity limits for each fire alarm control panel and loop also remain unchanged.

THE SELF-TEST FUNCTION

Each detector uses patented self-test technology to automatically apply a small, controlled amount of test aerosol or heat directly to the sensor.

SCHEMATIC OVERVIEW OF A LOOP



PROVEN FIRE DETECTOR OPTIONS WITH INTEGRATED SELF-TEST FUNCTION

O/So Optical Smoke Detector IQ8Quad-ST
Optical smoke detector with integrated audible alarm

O2T/F Multisensor Detector IQ8Quad-ST
Dual-optical and heat multisensor fire detector with integrated visual alarm

O2T/So Multisensor Detector IQ8Quad-ST
Dual-optical and heat multisensor fire detector with integrated audible alarm

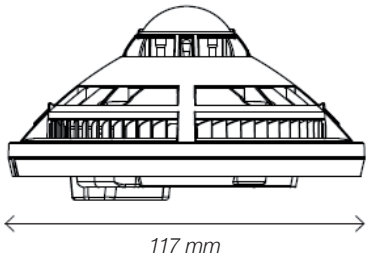
O2T/FSp Multisensor Detector IQ8Quad-ST
Dual-optical and heat multisensor fire detector with integrated voice alarm and visual alarm

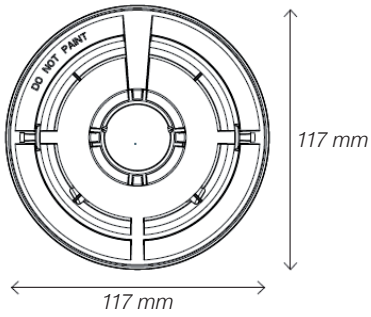
O2T/Sp Multisensor Detector IQ8Quad-ST
Dual-optical and heat multisensor fire detector with integrated voice alarm

CE VdS

EN 54-5/7/17/23/29

DIMENSIONS (mm)





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DETECTOR-SPECIFIC DATA

Type	O/So Multisensor Detector	O²T/F Multisensor Detector	O²T/So Multisensor Detector	O²T/FSp Multisensor Detector	O²T/Sp Multisensor Detector
Part No.	802382-ST	802383-ST	802384-ST	802385-ST / 802385.SVxx-ST	802386-ST / 802386.SVxx-ST
Alarm Device Type	Audible	Visual	Audible	Visual, Audible + Voice	Audible + Voice
Current @ 19 V DC	65 µA	80 µA	90 µA	100 µA	90 µA
Current @ FACP max	320 µA	400 µA	450 µA	500 µA	500 µA
Load Factor	2	2	2	3	3
Alarm Device Standard	EN 54-3	EN 54-23	EN 54-3	EN 54-23, EN 54-3 + Sprache	EN 54-23, EN 54-3 + Sprache
Specifications	EN 54-7 / EN 54-17	EN 54-7, EN 54-5 B, EN 54-17, EN 54-29, (CEA 4021)	EN 54-7, EN 54-5 B, EN 54-17, EN 54-29, (CEA 4021)	EN 54-7, EN 54-5 B, EN 54-17, EN 54-29, (CEA 4021)	EN 54-7, EN 54-5 B, EN 54-17, EN 54-29, (CEA 4021)
VdS Approval	G226060	G226062	G226061	G226059	G226061
Declaration of Performance	DoP-STAV030261015	DoP-STAV058261015	DoP-STAV055261015	DoP-STAV050261015	DoP-STAV055261015
Flash Energy, Red Visual Alarm	–	~3 J	–	~3 J	–
Light Intensity	–	max. 15,8 cd peak; 2,63 cd effective	–	max. 15,8 cd peak; 2,63 cd effective	–

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
Minimum ambient temperature for self-test	0˚C (smoke)
Relative humidity	≤ 95% (non-condensing)
Integrated loop isolator	Yes
IP rating:	IP21 with detector base IP42 with detector base + option 805570 IP43 with detector base + option 805572.50/805573
Material	ABS
Colour	White, similar to RAL 9010*
Dimensions	Ø 117 × H 63 mm (without base) Ø 117 × H 70 mm (with base)

*Available in custom RAL colours upon request.

ORDERING INFORMATION	ART.-NR.
802382-ST	O/So Optical Smoke Detector IQ8Quad-ST
802383-ST	O²T/F Multisensor Detector IQ8Quad-ST
802384-ST	O²T/So Multisensor Detector IQ8Quad-ST
802385-ST	O²T/FSp Multisensor Detector IQ8Quad-ST
802386-ST	O²T/Sp Multisensor Detector IQ8Quad-ST
805590	Standard Detector Base for IQ8Quad
805591	Detector Base with Relay Contact for IQ8Quad
805589ST	Detector Dust Cover for IQ8Quad with Integrated Alarm Device (50 pcs)
805580	Detector Removal Tool
805576	Labelling Plate for IQ8Quad Detector Base (10 pcs)
805587	Detector Base Cover for IQ8Quad (50 pcs)
259529	Detector heating
805560	EMC shielding for IQ8Quad detector bases (10 pcs)
805572.50	IP43 Adapter for IQ8Quad Detector Base for Damp Environments

Ref.: ESS_DS_Self-Test_EN • V.01 • 06/2026 • Technical specifications are subject to change without prior notice. © 2026 Honeywell International Inc.