

# KE-DP3021W Excellence series intelligent addressable dual optical/heat detector

#### General

The innovative Excellence range of intelligent addressable devices offers advanced features for reliability and peace of mind. Coupled with features for ease of installation and maintenance on new fire detection systems, it's a perfect match for exceptional overall performance.

The DP3021W is a Kidde Excellence series, traffic white addressable dual optical and heat detector. It combines a low profile design with tricolour status indication with 360° visibility. A remote indicator output is available as standard that supports a remote indicator up to 30 m away.

Detection reliability is ensured by combining dual optical wavelengths with multiple detection angles. This allows for state-of-the-art particle size detection that differentiates between real sources of alarm, or nuisance sources such as dust and steam. As a temperature detector Class A static and rate-of-rise modes are supported to further widen the application footprint.

#### **User friendly**

All detectors are individually identified by easily setting an address through 2, modern design rotary switches. The address is a directly identified number and does not require binary or hexadecimal conversions that significantly reduces the risk of incorrect addressing.

#### Installation & maintenance friendly

Self-testing and drift compensation ensure safe operation with a contamination warnings provided when maintenance is needed.

All Excellence series detectors are compatible with a standard base which makes installation planning seamless and detectors easily interchangeable.

#### **Communication protocol**

An enhanced protocol ensures the overall integrity and error-free operation of the system. The Excellence series protocol provides features like CRC error checking and multiple bus cycle codes to ensure reliability between panel and device communication. The Kidde Excellence protocol still support legacy 2000 series devices in combination with the Kidde Excellence series devices.

#### **Extended applications**

A comprehensive range of additional devices and accessories complement every Excellence series device. Appart from a feature rich detector line, a comprehensive range of in- and outdoor manual call points as well as a variety of I/0 modules and accessories enrich the overall Excellence system capability.



#### Details

- Remote indicator output with short circuit isolation for additional device protection
- Nuisance alarm, steam & dust discrimination for peace of mind
- Static and rate-of-rise temperature support
- Tri-colour indicators for alarm, pre alarm, isolation, fault. ItsMe, and communications takes the guesswork out of operational status
- · 360° indicator visibility means no device alignment to ensure visibility
- New mechanical rotary addressing for easy addressing
- Event logging in the device for diagnostics purposes when needed
- All levels sensitivity EN54 certified

# KE-DP3021W

## Excellence series intelligent addressable dual optical/heat detector

### **Technical specifications**

General		
Status indication	Tri-colour LED	
Compatibility	Kidde Commercial Excellence Systems	
Alarm levels	11	
Event log	Available	
Connectivity	Excellence series, standard base	
Addressing method	Rotary switch	
Electrical		
Power supply type	Loop powered	
Operating voltage	17 to 29 VDC	
Communication voltage	4 to 11 V pulsed	
Current consumption	140 μA (quiescent at 24 VDC)	
	4.75 mA (alarm at 24 VDC)	
Terminals	6	
Detection		
Detection principle	Optical light scatter, forward and backward / Heat	
Monitoring	Alarm threshold, Contamination level, Fault	
Sensitivity	Selectable	
Coverage area	< 112 m <sup>2</sup> (optical) / < 56.3 m <sup>2</sup> (heat)	
Particle sensitivity range	e 0.1 to 0.25 dB/m ±20%	
Alarm temperature (minimum)	+54°C	
Rate-of-rise	Supported	
Installation height	< 10.5 m (optical) / < 7.5 m (heat)	
Alarm temperature (maximum)	70°C	
Output		
Output quantity	1	
Output type and rating	Remote indicator	
Programmable	No	
Remote alarm output	< 8 mA	
Physical		
Physical dimensions	100 x 54 mm (Ø x H)	
	124 g	
Net weight	Traffic white (RAL9016)	
Net weight Colour	Traffic white (RAL9016)	
	Traffic white (RAL9016) Base mount	
Colour	,	
Colour Mounting type	Base mount	

Environmental		
Vandal proof	No	
Operating temperature	-10 to +55°C	
Storage temperature	-30 to +75°C	
Application temperature (maximum)	+50°C	
Application temperature (typical)	+25°C	
Relative humidity	10 to 93% noncondensing	
Environment	Indoor	
IP rating	IP20	
Regulatory		
Compliancy	CE, REACH, RoHS 3, WEEE	
Certification	CPR	
Standards	EN54-5, EN54-7	

#### **Compatible products**

Category	Reference	Description
Detection	KE-DB3010W	Excellence series intelligent detector
device		accessory - standard base



As a company of innovation, Carrier Fire & Security reserves the right to change product specifications without notice. For the latest product specifications, visit firesecurityproducts.com online or contact your sales representative.