

DATASHEET

LHD N45-Series – N4587A

Fiber Optic Linear Heat Detection

Each fiber optic LHD instrument is individually tested before shipping and must pass strict test limits. This ensures that every fiber optic LHD unit will meet or exceed the specifications in this datasheet. Adhering to our stringent quality control measures guarantees optimal performance and a long product life.

Functional Specifications						
Instrument Option	R01	R02	R04	R06	R08	R10
Distance range ⁽¹⁾	1 km	2 km	4 km	6 km	8 km	10 km
Optical wavelength	1064 nm					
Minimum sampling interval	0.25 m					
Minimum spatial resolution setting	0.5 m					
Measurement time	1 s to 30 s			2 s to 30 s	3 s to 30 s	4 s to 30 s
Optical channels	1 (C01), 2 (C02) and 4 (C04)					
Available measurement modes	Single-ended; Double-ended (loop, incl. fiber break recovery, not available with channel option C01)					



19" Rack Mount



Wall Mount



Interfaces & Power		
Optical connector / sensor fiber	E2000 APC 8° 50/125 µm graded index MM (OM2/OM3/OM4), ITU-T G.651.1	
User Interface	Web browser interface TFT-Display 480x272 pixel 4 front LEDs for power, measuring, fault and alarm 3 rear LEDs for power OK, SD card removable, laser ON	
Computer interface	2x Ethernet (LAN 10/100/1000), USB A, USB B	
Data storage capacity	512 MB internal, USB HDD/SSD, SD/SDHC card slot	
Communication protocol	SCPI, Option P01 : Modbus TCP	
Relays	Volt-free contacts, 30 V DC, 1 A Included: 4 inputs and 10 outputs Option SRO : 44 additional outputs Option SRR : 88 additional outputs Option TMx : Resistor configuration based on customer requirements	
Power	10 V to 30 V DC, 22 W typical at 20 °C ambient temperature, 40 W max	
Housing & Environmental		
Housing	19" Rack Mount (DR)	Wall Mount (DW) ⁽²⁾
Operating temperature range	-10 to +60 °C	
Storage temperature range	-40 to +80 °C	
Operating humidity range	0 to 95 % r.h. non-condensing	
Dimensions (H x W x D)	88 x 420 x 420 mm	473 x 420 x 105 mm
Weight	5 to 7 kg	7 to 9 kg



IEC 1068/14





Rear / bottom view

Safety		
Laser safety class	Class 1M laser product IEC 60825-1: 2014; EN 60825-1: 2014; FDA 21CFR1040.10+Laser Notice no.50	
Certifications		
Fire Certifications	EN54-22 (VdS) / UL 521 / ULC S531	
Safety Integrity Level (SIL) 2	IEC 61508	
ATEX	Option EX0 : (Steel armored sensor cable)	 I (M1) [Ex op is pr Ma] II (1) G [Ex op is pr IIC T6 Ga] II (1) D [Ex op is pr Da]
	Option EX1 : (Any sensor cable)	 I (M2) [Ex op is Mb] II (2) G [Ex op is IIC T6 Gb] II (2) D [Ex op is Db]
IECEX	Option EX0 : (Steel armored sensor cable)	[Ex op is pr Ma] [Ex op is pr IIC T6 Ga] [Ex op is pr Da]
	Option EX1 : (Any sensor cable)	[Ex op is Mb] [Ex op is IIC T6 Gb] [Ex op is Db]

- (1) Max. optical loss budget (one way) R01 = 3 dB, R02 = 4 dB, R04 = 6 dB, R06 = 8 dB, R08 = 10 dB, R10 = 12 dB - certifications may require a lower max. permissible loss values of the sensor.
- (2) Wallmount IP66 Housing options:
 A4500A (with window) with operating temp. range -20° to +60°C
 A4501A (without window) with operating temp. range -20° to +60°C
 A4502A (with insulation, without window) with operating temp. range -25° to +55°C

Product specifications and descriptions in this document are subject to change without notice and not binding to AP Sensing.

For more information:

 www.apsensing.com
 info@apsensing.com