



800 900 Series Linear Heat Detector (LHD)

System Sensor 800 series digital linear heat detector and 900 series analogue linear heat detector offer early detection of fire and overheating conditions in industrial high risk hazards as well as many types of commercial applications.

General

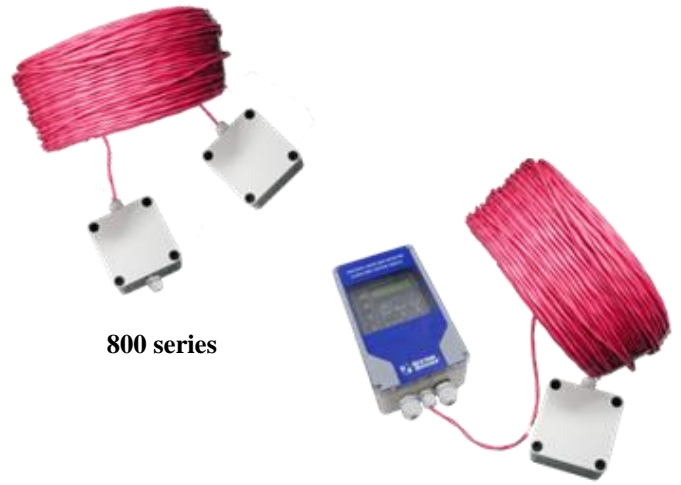
The Linear Heat Detection Cable (LHDC) is a continuous heat detector in the form of a cable. It can detect heat at any points along its entire length. The cable is composed of two twisted shield conductors insulated with a heat sensitive polymer, then wrapped with a protective tape and finished with an outer covering. Linear Heat Detection Cable is available in resettable and non-resettable technology. The non-resettable cable is described as Digital and the resettable as Analogue.

800 Series Digital LHD Cable (Non-Resettable)

The 800 series is a fixed temperature and non-resettable digital cable. The cable contains insulators which melt at a specific temperature. At the rated temperature, the heat sensitive polymeric insulation creates pressure between conductors, permitting them make contact with each other thereby initiating an alarm signal at the control panel. The LHDC is installed in conjunction with an end-of-line (EOL) device for continuity monitoring and a junction box (optional) for leader wire connection.

900 Series Analogue LHD Cable (Resettable)

The 900 series is an analogue heat sensing cable containing insulators of which resistance varies proportionally to changes in temperature. Analogue cable is installed in conjunction with an end-of-line (EOL) device for continuity monitoring and a modulator providing selectable alarm thresholds (programmed before shipping), fire and fault outputs. This cable is self-restorable after the fire event as long as its temperature does not exceed specified resettable temperature limit of 120°C (248°F). Alarm points 85°C and 105°C are available to choose for different applications. The alarm point is not programmable on application field, the factory default delivery on model JTW-LD-997, please use ordering model number JTW-LD-997-105 to order 105°C models.



800 series

900 series

Features

Multiple configurations for installations:

- Digital type of LHD cables
- Analogue type of LHD cables

Multiple alarm temperature ratings available for both digital and analogue type

Maximum zone length (Digital) - 1000 meters

Maximum zone length (Analogue) – 600 meters

Resettable temperature up to 120°C (248°F) (Analogue)

Selectable alarm temperature threshold programmed before shipping (Analogue)

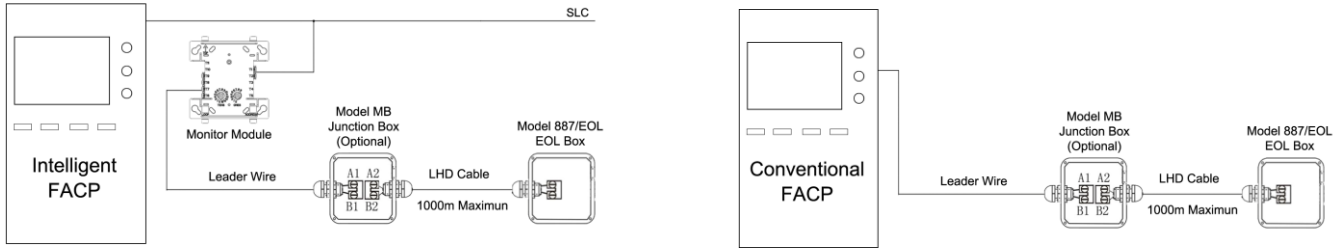
Normal, fault and alarm indicators on the 900 series modulator (Analogue)

Compatible with any conventional or intelligent fire alarm panel

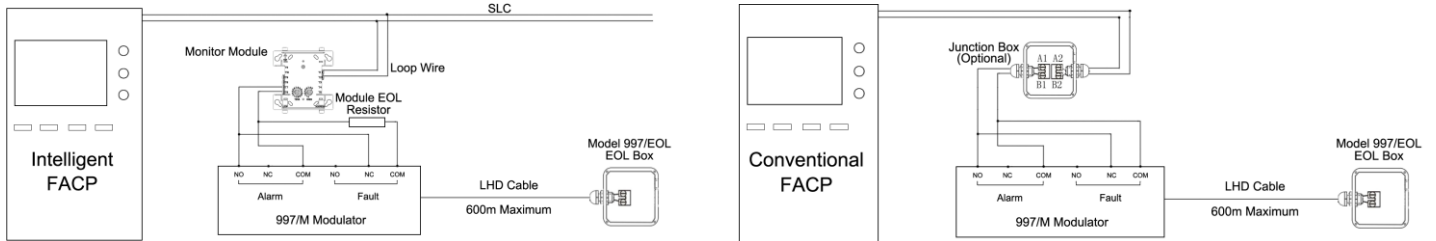
Smoothing algorithms provide false alarm immunity

Typical Wiring Diagrams & Specifications

800 Series:



900 Series:



Physical / Operating Specifications	JTW-LD-N*-887	JTW-LD-997
Type of Cable	Digital	Analogue
Alarm Temperature	66°C(150.8°F), 86°C (187°F), 99°C (210°F) & 138°C (280°F)	85°C(185°F), 105°C(221°F)
Operating Temperature Range	-55°C to (N* - 20)°C, -67°F to (N* - 36) °F	-55°C to (N* - 20)°C, -67°F to (N* - 36) °F
Reset Temperature	NA	≅ 120°C (248°F)
Max Zone Length	1000m	600m
Min Bend Radius	1.5 cm	1.5 cm
Standard Reel Length	200m or 600m	200m or 600m
Conductor Material	Steel	Steel
Outer Sheath Option	Nylon for 86°C (187°F) & 99°C (210°F) PVC for 66°C(150.8°F) & 138°C (280°F)	PVC
Weight	1.8kg/100m (1.2lb/100ft)(PVC sheath)	1.4kg/100m (0.94lb/100ft)(PVC sheath)
Electrical Specifications	JTW-LD-N*-887	JTW-LD-997
Operating Voltage / Contact Ratings	NA	20 – 26 VDC
Standby Current	NA	25mA
Alarm and Fault Current	NA	45mA
Resistance	0.32ohms/m (0.1ohms/ft)	NA

* N Refers to as alarm points

Ordering Information

	Model #	Ordering model #	Description	Alarm point	UL	ULC	UOM
800 series	JTW-LD-66-887	JTW-LD-66-887	Digital heat sensing cable, PVC sheath	66°C(150.8°F)			Meter
	JTW-LD-86-887N	JTW-LD-86-887N	Digital heat sensing cable, Nylon sheath	86°C(187°F)	x		Meter
	JTW-LD-99-887N	JTW-LD-99-887N	Digital heat sensing cable, Nylon sheath	99°C(210°F)	x	x	Meter
	JTW-LD-138-887	JTW-LD-138-887	Digital heat sensing cable, PVC sheath	138°C(280°F)	x	x	Meter
	887EOL	887EOL	End of line box for 800 series cable	-	x	x	Each
900 series	JTW-LD-997	JTW-LD-997	Analogue heat sensing cable, 85°C	85°C(185°F)	x		Meter
	JTW-LD-997	JTW-LD-997-105	Analogue heat sensing cable, 105°C	105°C(221°F)	x		Meter
	997/M	997/M	Modulator for 900 series cable, 85°C	-			Each
	997/M-105	997/M-105	Modulator for 900 series cable, 105°C	-			Each
	997/EOL	997/EOL	End of line box for 900 series cable	-			Each
Accessories	MB	MB-UL	Junction box for 800/900 series cable	-	x	x	Each