

FG-DLC

Point Sensor for Liquid Cooling

Product Datasheet



- ► Designed for Liquid Cooling Applications
- ► High-sensitivity and Flexible Sense Cable
- ► High-visibility LED with Real Time Status
- ► Pre-equipped Sense Cable for Easy Setup
- ► Tight Space Friendly and Lightweight

Description

The FG-DLC is a **point sensor designed to detect leaks of conductive coolant liquids**. It is pre-equipped with a specified length of sense cable and connects seamlessly to TTK digital units such as the FG-SYS or FG-NET, providing instant leak detection.

In the event of liquid leak on the sense cable connected on the FG-DLC, the device will blink red, and the connected digital unit will respond as follows:

- An audible alarm is triggered and a relay is activated.
- The details of the fault (the type of fault: leak or cable break) and the address of the FG-DLC are displayed on the screen.
- Event report is sent to the BMS via MODBUS /JBUS protocol.

Key Advantages

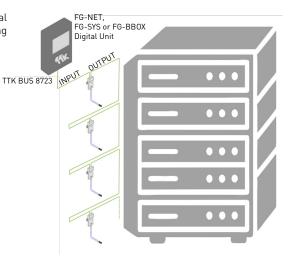
- Specifically developed for liquid cooling technique using conductive coolant fluids in data center applications.
- Pre-equipped with a standard length (0.5 m, 1 m and 2 m) of sense cable for easy setup.
- Up to 40 FG-DLC can be connected to one circuit of a digital unit.
- High visibility LED to provide quick identification of the status in real time:
 - Blinking green: normal, no alarm.
 - Blinking red: leak detected on the box.
 - No LED light: cablebreak detected on the box or loss of communication.
- Two fixing eyelets on the sides.

- The FG-DLC detects rapidly a liquid leak that comes in contact with it.
- The FG-DLC detects any break or cut to the cable.
- High-sensitivitiy and enhanced durability sense cable.
- The FG-DLC is tight space friendly, its compact design is ideal for confined spaces like server racks in data centers, drip trays, bunded areas, and more.
- Flexible and lightweight sense cable, designed for easy handling and adaptation to various installation environments.
- A simple bi-annual test is all that is required.

Connection Schematic

- Maximum: 40 FG-DLC (40 addresses) connected to one circuit of a Digital Unit.
- In the schematic, INPUT corresponds to the TTK BUS 8723 cable coming from the Digital Unit; OUTPUT corresponds to the TTK BUS 8723 cable leaving towards the following FG-DLC.





Technical Data

Compatibility	Digital units: FG-SYS, FG-NET, FG-BBOX
Reusability	Reusable, as long as the cable hasn't been damaged by prolonged immersion in liquid
Sense Cable Material & Nominal Diameter	LSZH based on PE, 4 mm
Sensor Wires Diameter & Material	PE, 1.2 mm
Core Material	LSZH based on PE
Minimum Bend Radius	10 mm
Color	Box: Translucent, sense cable: purple
Operating Temperature	-15°C to +55°C
Ingress Protection	IP 40
Enclosure Type	Polyamide (PA) UL94 V0
Dimensions (W,H,D)	27mm x 59mm x 16mm without eyelets 56mm x 59mm x 16mm with eyelets

Product Information

Four Wires Sense Cable:

2 Return Wires and 2 Wires for Leak Detection



2 Black and White Sense Wires

Identification Codes

FG-DLC0.5	Length of Sense Cable in 0.5 m Preconnected to a Digital Diversion Device
FG-DLC1	Length of Sense Cable in 1 m Preconnected to a Digital Diversion Device
FG-DLC2	Length of Sense Cable in 2 m Preconnected to a Digital Diversion Device
FG-DLC3	Length of Sense Cable in 3 m Preconnected to a Digital Diversion Device
FG-NC0.5	Jumper Cable 0.5 m with Connectors
FG-NCL KIT	Jumper Cable Kit
FG-NCL1	1m Bus between Two Sense Cables for Liquid Cooling
FG-NCL3	3m Bus between Two Sense Cables for Liquid Cooling
FG-NCL7	7m Bus between Two Sense Cables for Liquid Cooling
FG-NCL-F	1m Jumper Cable with Female Connector
FG-NCL-M	1m Jumper Cable with Male Connector
FG-TLC	End Plug

2 Continuity Wires

Certification



All TTK sense cables are designed as a part of the leak detection system and were used for the approval certification for TTK monitoring panels.

- FG-NET and FG-SYS are UL Listed.
- FG-NET system is certified FM7745.

This brochure has been carefully prepared to ensure technical accuracy but is only intended for promotional use. TTK cannot guarantee that the information contained herein contains no errors or omissions, and hence does not accept responsibility related to the use of its equipment. TTK maintain its obligations set forth in the Standard Terms and Conditions of Sale and will not, under any circumstances, assume liability for any incidental damages, indirect or consequential, arising from the sale, resale, use or misuse of this product. The purchaser(s) accept their responsibility as the sole judge(s) of the adaptability of the product for the intended use.

FG-NET, FG-SYS and TOPSurveillance are trademarks of TTK S.A.S. $\,$ $\,$ © TTK 2025 $\,$

- TTK UK Ltd. / 3 Luke Street / London EC2A 4PX / United Kingdom / T:+44 207 729 6002 / F:+44 207 729 6003 / www.ttkuk.com / sales@ttkuk.com
- TTK Pte Ltd. / #09-05, Shenton House, 3 Shenton Way / Singapore 068805 / T: +65.6220.2068 / M: +65.9271.6191 / F: +65-6220.2026 / www.ttk.sg / info@ttk.sg
- TTK Asia Ltd. / 2107-2108 Kai Tak Commercial Building / 317 Des Voeux Road Central / Hongkong / T: +852.2858.7128 / F: +852.2858.8428 / www.ttkasia.com / info@ttkasia.com
- TTK Middle East FZC0 / Building 6EA, Office 510 PO Box 54925 / Dubai Airport Free Zone / UAE / T: +971 4 70 17 553 / M: +971 50 259 66 29 / www.ttkuk.com / cgalmiche@ttk.fr
- TTK Headquarters / 19, rue du Général Foy / 75008 Paris / France / T:+33.1.56.76.90.10 / F:+33.1.55.90.62.15 / www.ttk.fr / ventes@ttk.fr

OUTPUT TTK BUS 8723