

# FG-BB-PoE

## Digital Satellite Detection Panel With PoE Power Supply

#### **Product Datasheet**





- ► Satellite Detection Panel Managed by FG-NET
- ▶ Powered by PoE Switch
- ► Digital, Addressable
- ► Controls up to 5 Lengths of Sense Cables
- ► Simultaneous Leak Detection and Location

#### Description

FG-BB-PoE is a **Lite version** of the FG-BBOX satellite detection panel, connected to FG-NET and managed via a conventional Ethernet network. The specificity of FG-BB-PoE is that it functions <u>without</u> traditional 230 VAC power supply. Powered by a PoE (Power over Ethernet) switch, it offers a great simplicity and flexibility for the deployment of the system.

FG-BB-PoE extends the functionality of FG-NET by controlling an additional circuit of sense cables over five lengths, ideal for site extensions.

FG-BB-PoE is compatible with all TTK digital sense cables: water, acids and hydrocarbon sense cables.

In case of a leak detection on the sense cables connected to FG-BB-PoE, the concerned relay is triggered and the LED turns red.

#### **Key Advantages**

- Scalable System: Up to 25 FG-BB-PoE units can be added to a single FG-NET system, ensuring long-term expandability.
- Simplified System Deployment: No external power supply is required for the FG-BB-PoE, eliminating the need for additional cabling.
- Flexible Installation: The FG-BB-PoE can be installed without restrictions on proximity to fixed power outlets.
- Reliable During Power Failures: When connected to an uninterruptible power supply (UPS), the FG-BB-PoE leak detection panel remains operational during power outages, ensuring functionality in critical environments like data centers.
- Independent Cable Management: Capable of independently managing up to five digital sense cables, controlling a maximum length of 735 ft (225 m)\*.
- Capable of detecting and locating multiple leaks simultaneously (5 cables = 5 potential alarms).
- Precise & Simultaneous Leak Detection: Detects and pinpoints multiple leaks at once for water, acids and hydrocarbon leak.
- Reliable & Intelligent Monitoring: Detects cable break faults while

- maintaining system integrity by continuing to monitor all preceding
- Smart Connectivity & Alerts: Uses TCP/IP (RJ45 Ethernet) for easy integration with BMS via MODBUS/JBUS, and features 4 relay outputs.
- Customizable & Secure: Each sense cable is fully addressable and can be renamed, ensuring clear identification and easy system management.
- Real-Time Indicator Light: The FG-BB-PoE has no display but features a indicator light (green or red) for real-time status identification. It can be installed discreetly while all command and control remain centralized on the FG-NET unit.
- \*: 735 ft (225m) maximum with FG-ECX/FG-ACX type water/acids sense cables via FG-DCTL box (5 x147 ft [45 m]),
- 325 ft (100m) maximum for FG-DD20 hydrocarbon cables (5 x 65 ft [20m]), 246 ft (75m) maximum for FG-EC15 type water/acids sense cables (5 x 49 ft [15m]).

#### **Technical Data**

Digital unit: FG-NET Digital sense cables: FG-EC, FG-AC, FG-OD range Analog sense cables livia FG-DTCS boxl: FG-ECS, FG-ACS Diversion / Interface boxes: FG-DTC, FG-DTCL, FG-DDD  Dimensions & Weight 3.4" w x 5.16" H x 2.17"D [161 mm W x 131 mm H x 55 mm D] 1.1 lbs (D5 kg) Sensor Capacity 5 lengths of sense cable Location Accuracy Water & acids leak detection: +/- 3 ft (1 m) Dil leak detection: section Operating Languages NA Supply Voltage PoE switch  Current NA Power Consumption 6 W Operating Temperature 5°F to 131°F [-15°C to 55°C] Case Type ABS flame retardant UL94V0 Screen Size No screen Format Wall mounted Ingress Protection NA IT Security TOP/IP connection [IPv4, IPv6] & Log-In Trap, HTTPS with TLS1.2, RFC 5280: X.509 (PKIC and CRL profile, IEEE 802.1X support, RADIUS or EAP-TLS) Network Numbers of Realys Relay Types Volt free dry contact (No, NC, COM) Power Failure Relay Type of Faults Available on the Configurable Relays Non-configurable Maximum Relay Switching Voltage Maximum Relay Switching Capacity 6 U W [30 v x 2A]		
Sensor Capacity  5 lengths of sense cable  Location Accuracy  Water & acids leak detection: +/- 3 ft {1 m} Oil leak detection: section  Operating Languages  NA  Supply Voltage  PoE switch  Current  NA  Power Consumption  6 W  Operating Temperature  5°F to 131°F {-15°C to 55°C}  Case Type  ABS flame retardant UL94V0  Screen Size  No screen  Format  Wall mounted  Ingress Protection  IP40 - Indoor use only  Serial Connection  NA  IT Security  ToP/IP connection (IPv4, IPv6) & Log-In Trap, HTTPS with TLS1.2, RFC 5280: X.509 (PKIC and CRL profile, IEEE 802.1X support, RADIUS or EAP-TLS)  Network  Numbers of Realys  3 {1 leak + 1 break common fault + 1 power failure relay}  Relay Types  Volt free dry contact (NO, NC, COM)  Power Failure Relay  Type of Faults Available on the Configurable Relays  Maximum Relay Switching Voltage  125 VAC and 220 VDC	Compatibility	Digital sense cables: FG-EC, FG-AC, FG-OD range Analog sense cables (via FG-DTCS box): FG-ECS, FG-ACS
Water & acids leak detection: +/- 3 ft {1 m}     Oil leak detection: section	Dimensions & Weight	
Operating Languages NA Supply Voltage PoE switch Current NA Power Consumption 6 W Operating Temperature 5°F to 131°F (-15°C to 55°C) Case Type ABS flame retardant UL94V0 Screen Size No screen Format Wall mounted Ingress Protection IP40 - Indoor use only Serial Connection NA IT Security TCP/IP connection (IPv4, IPv6) & Log-In Trap, HTTPS with TLS1.2, RFC 5280: X.509 (PKIC and CRL profile, IEEE 802.1X support, RADIUS or EAP-TLS) Network 10/100BASE-T; IPv4/IPv6 Numbers of Realys Relay Types Volt free dry contact (NO, NC, COM) Power Failure Relay Type of Faults Available on the Configurable Relays Maximum Relay Switching Voltage T25 VAC and 220 VDC	Sensor Capacity	5 lengths of sense cable
Supply Voltage       PoE switch         Current       NA         Power Consumption       6 W         Operating Temperature       5°F to 131°F [ -15°C to 55°C)         Case Type       ABS flame retardant UL94V0         Screen Size       No screen         Format       Wall mounted         Ingress Protection       IP40 - Indoor use only         Serial Connection       NA         IT Security       TCP/IP connection (IPv4, IPv6) & Log-In Trap, HTTPS with TLS1.2, RFC 5280: X.509 [PKIC and CRL profile, IEEE 802.1X support, RADIUS or EAP-TLS)         Network       10/100BASE-T; IPv4/IPv6         Numbers of Realys       3 (1 leak + 1 break common fault + 1 power failure relay)         Relay Types       Volt free dry contact (NO, NC, COM)         Power Failure Relay       Activated on loss of supply voltage         Type of Faults Available on the Configurable Relays       Non-configurable         Maximum Relay Switching Voltage       125 VAC and 220 VDC	Location Accuracy	
Current  Power Consumption 6 W  Operating Temperature 5°F to 131°F (-15°C to 55°C) Case Type ABS flame retardant UL94V0  Screen Size No screen  Format Wall mounted Ingress Protection IP40 - Indoor use only Serial Connection NA  IT Security TCP/IP connection (IPv4, IPv6) & Log-In Trap, HTTPS with TLS1.2, RFC 5280: X.509 (PKIC and CRL profile, IEEE 802.1X support, RADIUS or EAP-TLS)  Network 10/100BASE-T; IPv4/IPv6 Numbers of Realys 3 (1 leak + 1 break common fault + 1 power failure relay)  Relay Types Volt free dry contact (NO, NC, COM)  Power Failure Relay Type of Faults Available on the Configurable Relays Maximum Relay Switching Voltage 125 VAC and 220 VDC	Operating Languages	NA
Power Consumption  6 W  Operating Temperature  5°F to 131°F [-15°C to 55°C]  Case Type  ABS flame retardant UL94V0  Screen Size  No screen  Format  Wall mounted  Ingress Protection  IP40 - Indoor use only  Serial Connection  IT Security  TCP/IP connection (IPv4, IPv6) & Log-In Trap, HTTPS with TLS1.2, RFC 5280: X.509 (PKIC and CRL profile, IEEE 802.1X support, RADIUS or EAP-TLS)  Network  10/100BASE-T; IPv4/IPv6  Numbers of Realys  3 [1 leak + 1 break common fault + 1 power failure relay)  Relay Types  Volt free dry contact (NO, NC, COM)  Power Failure Relay  Type of Faults Available on the Configurable Relays  Non-configurable  Maximum Relay Switching Voltage  125 VAC and 220 VDC	Supply Voltage	PoE switch
Operating Temperature  5°F to 131°F (-15°C to 55°C)  ABS flame retardant UL94V0  Screen Size  No screen  Wall mounted  Ingress Protection  IP40 - Indoor use only  Serial Connection  NA  IT Security  TCP/IP connection (IPv4, IPv6) & Log-In Trap, HTTPS with TLS1.2, RFC 5280: X.509 (PKIC and CRL profile, IEEE 802.1X support, RADIUS or EAP-TLS)  Network  10/100BASE-T; IPv4/IPv6  Numbers of Realys  3 (1 leak + 1 break common fault + 1 power failure relay)  Relay Types  Volt free dry contact (NO, NC, COM)  Power Failure Relay  Type of Faults Available on the Configurable Relays  Non-configurable  Maximum Relay Switching Voltage  125 VAC and 220 VDC	Current	NA
Case Type  Screen Size  No screen  Format  Wall mounted  Ingress Protection  IP40 - Indoor use only  Serial Connection  IT Security  TCP/IP connection (IPv4, IPv6) & Log-In Trap, HTTPS with TLS1.2, RFC 5280: X.509 (PKIC and CRL profile, IEEE 802.1X support, RADIUS or EAP-TLS)  Network  10/100BASE-T; IPv4/IPv6  Numbers of Realys  3 (1 leak + 1 break common fault + 1 power failure relay)  Relay Types  Volt free dry contact (NO, NC, COM)  Power Failure Relay  Activated on loss of supply voltage  Type of Faults Available on the Configurable Relays  Maximum Relay Switching Voltage  125 VAC and 220 VDC	Power Consumption	6 W
Screen Size  Format  Wall mounted  Ingress Protection  IP40 - Indoor use only  Serial Connection  NA  IT Security  TCP/IP connection (IPv4, IPv6) & Log-In Trap, HTTPS with TLS1.2, RFC 5280: X.509 (PKIC and CRL profile, IEEE 802.1X support, RADIUS or EAP-TLS)  Network  10/100BASE-T; IPv4/IPv6  Numbers of Realys  3 (1 leak + 1 break common fault + 1 power failure relay)  Relay Types  Volt free dry contact (NO, NC, COM)  Power Failure Relay  Activated on loss of supply voltage  Type of Faults Available on the Configurable Relays  Maximum Relay Switching Voltage  125 VAC and 220 VDC	Operating Temperature	5°F to 131°F ( -15°C to 55°C)
Format Ingress Protection IP40 - Indoor use only Serial Connection IT Security TCP/IP connection (IPv4, IPv6) & Log-In Trap, HTTPS with TLS1.2, RFC 5280: X.509 (PKIC and CRL profile, IEEE 802.1X support, RADIUS or EAP-TLS) Network 10/100BASE-T; IPv4/IPv6 Numbers of Realys 3 (1 leak + 1 break common fault + 1 power failure relay) Relay Types Volt free dry contact (NO, NC, COM) Power Failure Relay Type of Faults Available on the Configurable Relays Maximum Relay Switching Voltage 125 VAC and 220 VDC	Case Type	ABS flame retardant UL94V0
Ingress Protection  IP40 - Indoor use only  Serial Connection  NA  IT Security  TCP/IP connection (IPv4, IPv6) & Log-In Trap, HTTPS with TLS1.2, RFC 5280: X.509 (PKIC and CRL profile, IEEE 802.1X support, RADIUS or EAP-TLS)  Network  10/100BASE-T; IPv4/IPv6  Numbers of Realys  3 (1 leak + 1 break common fault + 1 power failure relay)  Relay Types  Volt free dry contact (NO, NC, COM)  Power Failure Relay  Type of Faults Available on the Configurable Relays  Maximum Relay Switching Voltage  125 VAC and 220 VDC	Screen Size	No screen
Serial Connection  IT Security  TCP/IP connection (IPv4, IPv6) & Log-In Trap, HTTPS with TLS1.2, RFC 5280: X.509 (PKIC and CRL profile, IEEE 802.1X support, RADIUS or EAP-TLS)  Network  10/100BASE-T; IPv4/IPv6  Numbers of Realys  3 (1 leak + 1 break common fault + 1 power failure relay)  Relay Types  Volt free dry contact (NO, NC, COM)  Power Failure Relay  Type of Faults Available on the Configurable Relays  Maximum Relay Switching Voltage  125 VAC and 220 VDC	Format	Wall mounted
IT Security  TCP/IP connection (IPv4, IPv6) & Log-In Trap, HTTPS with TLS1.2, RFC 5280: X.509 (PKIC and CRL profile, IEEE 802.1X support, RADIUS or EAP-TLS)  Network  10/100BASE-T; IPv4/IPv6  Numbers of Realys  3 (1 leak + 1 break common fault + 1 power failure relay)  Relay Types  Volt free dry contact (NO, NC, COM)  Power Failure Relay  Type of Faults Available on the Configurable Relays  Maximum Relay Switching Voltage  125 VAC and 220 VDC	Ingress Protection	IP40 - Indoor use only
and CRL profile, IEEE 802.1X support, RADIUS or EAP-TLS)  Network  10/100BASE-T; IPv4/IPv6  Numbers of Realys  3 [1 leak + 1 break common fault + 1 power failure relay)  Relay Types  Volt free dry contact (NO, NC, COM)  Power Failure Relay  Activated on loss of supply voltage  Type of Faults Available on the Configurable Relays  Maximum Relay Switching Voltage  125 VAC and 220 VDC	Serial Connection	NA
Numbers of Realys  3 (1 leak + 1 break common fault + 1 power failure relay)  Relay Types  Volt free dry contact (NO, NC, COM)  Power Failure Relay  Activated on loss of supply voltage  Type of Faults Available on the Configurable Relays  Maximum Relay Switching Voltage  125 VAC and 220 VDC	IT Security	
Relay Types  Volt free dry contact (NO, NC, COM)  Power Failure Relay  Activated on loss of supply voltage  Type of Faults Available on the Configurable Relays  Maximum Relay Switching Voltage  125 VAC and 220 VDC	Network	10/100BASE-T; IPv4/IPv6
Power Failure Relay Activated on loss of supply voltage Type of Faults Available on the Configurable Relays Maximum Relay Switching Voltage 125 VAC and 220 VDC	Numbers of Realys	3 (1 leak + 1 break common fault + 1 power failure relay)
Type of Faults Available on the Configurable Relays  Non-configurable  Maximum Relay Switching Voltage  125 VAC and 220 VDC	Relay Types	Volt free dry contact (NO, NC, COM)
Maximum Relay Switching Voltage 125 VAC and 220 VDC	Power Failure Relay	Activated on loss of supply voltage
	Type of Faults Available on the Configurable Relays	Non-configurable
Maximum Relay Switching Capacity 60 W (30 V x 2A)	Maximum Relay Switching Voltage	125 VAC and 220 VDC
	Maximum Relay Switching Capacity	60 W (30 V x 2A)

#### **Identification Codes**

FG-BB-PoE	FG-NET's Satellite Device with PoE Switch Power Supply
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### Certifications



Read carefully the installation procedure for the FG-BB-PoE unit.  $\label{eq:poch}$ 

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