# FloBoss™ 107E Enclosure Options

The 107E Enclosure Options consist of two weather-tight enclosures for the FloBoss 107 Flow Manager (FB107). One of the enclosures is made from steel, and the other enclosure is made from polycarbonate. For more information on the FB107, refer to *Product Data Sheet FB107*. Both the steel and the polycarbonate enclosures protect the electronics of the FB107 from physical damage and harsh environments. The enclosures have a hinged and gasketed door that is secured by one lockable hasp on the steel enclosure and two lockable hasps on the polycarbonate enclosure.

The enclosures are both designed to house a 4-slot FB107. The steel enclosure has integral mounting flanges for wall or panel mounting. The polycarbonate enclosure has detachable plastic mounting feet for wall and panel mounting. A mounting kit is included with both enclosures for pipe-mount applications. Both enclosures contain mounting provisions for a radio, and the steel enclosure also contains mounting provisions for up to four batteries.

Multiple ordering options are available for both types of enclosures:

- Enclosure (steel or polycarbonate) with LCD Touchpad and 4-slot FB107 base chassis.
- Enclosure (steel or polycarbonate) with LCD Touchpad (without 4-slot FB107 base chassis).
- Enclosure (steel only) and 4-slot FB107 base chassis.
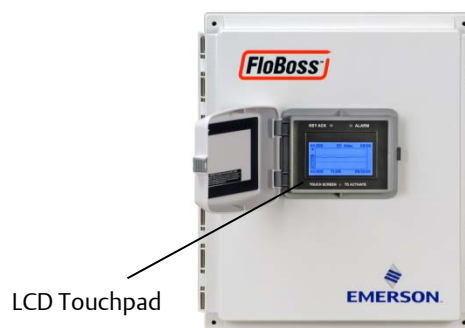- Enclosure (steel only) (without 4-slot FB107 base chassis).

Note: Add a CPU module to the 4-slot FB107 base chassis to create a working unit. For more information on available CPU modules, refer to *Product Data Sheet FB107*.

You can view selected data stored on the FB107 through the optional LCD Touchpad. For more information on the LCD Touchpad, refer to *Product Data Sheet FB107:LCD*.

Both FB107E enclosures may have either an integral differential pressure Dual Variable Sensor (DVS) or a pressure module (PM) mounted directly to the base of the enclosure.
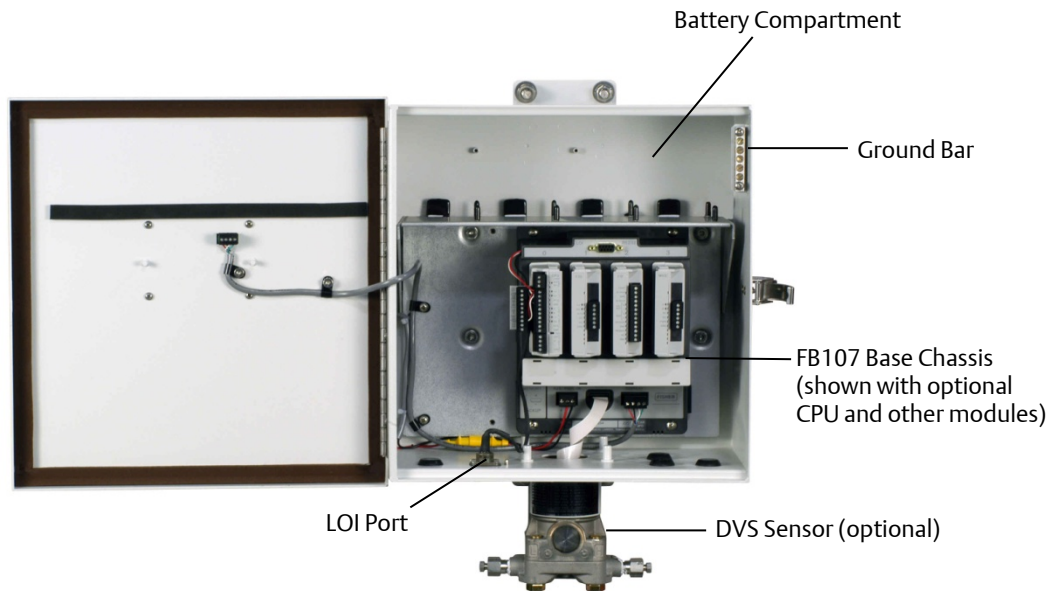
The optional Dual Variable Sensor (DVS) uses Emerson capacitance cell technology to sense differential pressure and piezo-resistive silicon sensor technology to sense static pressure. A dedicated microprocessor in the DVS linearizes and corrects the raw sensor signals using characterization data stored in non-volatile memory. For more information, refer to *Product Data Sheet DVS205*.

The optional PM module includes pressure transducers to measure one or two pressure inputs. For more information, refer to the specification table on page 5.



LCD Touchpad

*FloBoss 107E Steel Enclosure with LCD Touchpad (shown with optional DVS)*



*FloBoss 107E Steel Enclosure (shown with optional DVS)*



LCD Touchpad

*FloBoss 107E Polycarbonate Enclosure with LCD Touchpad (shown without optional DVS or PM)*

**Remote Automation Solutions**

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## FB107E Steel Enclosure

**Enclosure** (typical component layout)



Battery Compartment

Ground Bar

FB107 Base Chassis
(shown with optional
CPU and other modules)

LOI Port

DVS Sensor (optional)

| Physical | | |
|---|---|---|
| Construction | | Powder-coated (gray polyurethane) 14-gauge carbon steel with lockable 300-series stainless steel hasp and gasketed door. |
| Wiring Access | | Four 0.88-inch pre-punched holes in bottom. |
| Dimensions | Overall | 360 mm H by 332 mm W by 166 mm D (14.17 in. H by 13.07 in. W by 6.54 in. D). Height includes mounting flanges and excludes sensor option. Optional LCD Touchpad adds 25 mm (1.0 in.) to depth. |
| | Wall Mounting | 350 mm H by 72 mm W (13.80 in. H by 2.81 in. W) between mounting hole (0.38 in. diameter) centers. |
| | Pipestand Mounting | Mounts on 2-inch pipe with U-bolt mounting kit (supplied). |
| Batteries (not included) | | To meet CSA requirements, use sealed, non-venting, rechargeable batteries. |
| | Output | 12 Vdc, 6.5-7.2 Amp-hours |
| | Dimensions | 152 mm L by 65 mm W by 94 mm H (5.95 in. L by 2.54 in. W by 3.70 in. H) |
| | Terminal Type | FASTON® 4.75 mm by 0.81 mm (0.187 in. by 0.032 in.) |
| | Recommended Batteries | Powersonic PS-1270 Panasonic LCR12V7.2P Yuasa NP7-12 |
| Weight (excluding batteries) | Enclosure | 8.62 kg (19 lb) |
| | 4-slot FB107 base chassis | 0.76 kg (1.68 lb) |
| | LCD Touchpad | 0.23 kg (0.51 lb) |

| | | |
|---|---|---|
| | DVS sensor | 1.82 kg (4.01 lb) |
| | PM module | 2.28 kg (5.02 lb) |

## Sensors (optional)

| | |
|---|---|
| Dual-Variable Sensor (DVS) | For more information on the DVS, refer to *Product Data Sheet DVS205*. |
| Pressure Module (PM) | For more information on the PM, refer to the PM module specification table. |

## LCD Touchpad (optional)

128 x 64 pixel display, backlit. For more information on the LCD Touchpad, refer to *Product Data Sheet FB107:LCD*.

## Ordering Options

- Enclosure and 4-slot FB107 base chassis
- Enclosure with LCD Touchpad and 4-slot FB107 base chassis
- Enclosure (without 4-slot FB107 base chassis)
- Enclosure with LCD Touchpad (without 4-slot FB107 base chassis)
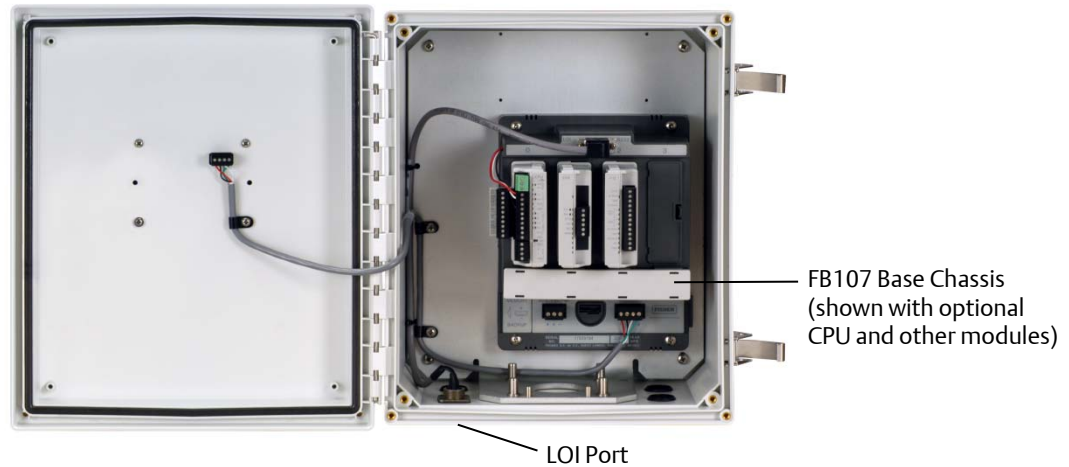
## Approvals

Meets CSA Type 4 rating (NEMA 4 equivalent).

| | | |
|---|---|---|
| Miscellaneous Approvals | RoHS2 | RoHS (2) EU Directive 2011/65/EU: This product may be considered out-of-scope when used for the intended design purpose in a Large Scale Fixed Installation (LSFI). Consult https://www.emerson.com/compliance for up-to-date product information. |
| | RoHS (China) |  |

## FB107E Polycarbonate Enclosure

**Enclosure** (typical component layout)



FB107 Base Chassis
(shown with optional
CPU and other modules)

LOI Port

| **Physical** | | |
|---|---|---|
| Construction | | Non-metallic polycarbonate with two lockable 300-series stainless steel hasps and polyurethane gasketed door. |
| Wiring Access | | Three 0.88-inch pre-punched holes in bottom. |
| Dimensions | Overall | 342 mm H by 289 mm W by 171 mm D (13.5 in. H by 11.4 in. W by 6.7 in. D). Height includes mounting flanges and excludes sensor option. Optional LCD Touchpad adds 25 mm (1.0 in.) to depth. |
| | Wall Mounting | 322 mm H by 203 mm W (12.7 in. H by 8.0 in. W) between mounting hole (0.18 in. diameter) centers. |
| | Pipestand Mounting | Mounts on 2-inch pipe with U-bolt mounting kit (supplied). |
| Weight (excluding batteries) | Enclosure | 4.23 kg (9.32lb) |
| | 4-slot FB107 base chassis | 0.76 kg (1.68 lb) |
| | LCD Touchpad | 0.23 kg (0.51 lb) |
| | DVS sensor | 1.82 kg (4.01 lb) |
| | PM module | 2.28 kg (5.02 lb) |
| **Sensors** (optional) | | |
| Dual-Variable Sensor (DVS) | | For more information on the DVS, refer to *Product Data Sheet DVS205*. |
| Pressure Module (PM) | | For more information on the PM, refer to the PM module specification table. |
| **LCD Touchpad** | | |
| 128 x 64 pixel display, backlit. For more information on the LCD Touchpad, refer to *Product Data Sheet FB107:LCD*. | | |
| **Ordering Options** | | |

- Enclosure with LCD Touchpad and 4-slot FB107 base chassis
- Enclosure with LCD Touchpad (without 4-slot FB107 base chassis)

**Approvals**

Meets CSA Type 4X rating (NEMA 4X equivalent).

| Miscellaneous Approvals | RoHS2 | RoHS (2) EU Directive 2011/65/EC: This product may be considered out-of-scope when used for the intended design purpose in a Large Scale Fixed Installation (LSFI). Consult https://www.emerson.com/compliance for up-to-date product information. |
| --- | --- | --- |
| | RoHS (China) | |

## Pressure Module (optional)

| Pressure Module |
|---|



Pressure Module

| Pressure Transducer Input | | | |
|---|---|---|---|
| Type | Sealed gauge | | |
| Range Options | 0 – 6.9 bar (0 – 100 psi)<br>0 – 20.7 bar (0 – 300 psi)<br>0 – 69.0 bar (0 – 1000 psi) | | |
| Operating Temperature | −40°C to +70°C (−40°F to +158°F) | | |
| Accuracy (includes linearity, hysteresis, and repeatability) | Range | 0 – 6.9 bar (0 – 100 psi) | ±0.35% of URL |
| | | 0 – 20.7 bar (0 – 300 psi) | ±0.35% of URL |
| | | 0 – 69.0 bar (0 – 1000 psi) | ±0.35% of URL |
| Ambient Temperature Effect | Range | 0 – 6.9 bar (0 – 100 psi) | ±0.35% of URL per 50°F (28°C) over the operating temperature range |
| | | 0 – 20.7 bar (0 – 300 psi) | ±0.35% of URL per 50°F (28°C) over the operating temperature range |
| | | 0 – 69.0 bar (0 – 1000 psi) | ±0.35% of URL per 50°F (28°C) over the operating temperature range |
| **Physical** | | | |
| Construction | Interface housing | 6061 aluminum, painted | |
| | Pressure Transducers | SST | |
| | Mounting flange | 6061 aluminum | |
| Process Connections | 1/4-18 NPT, located on sides of interface. | | |

| Approvals | | |
|---|---|---|
| Meets CSA Class I, Div. 2 Groups A, B, C, and D requirements when used in conjunction with the FB107. | | |
| Miscellaneous Approvals | RoHS2 | RoHS (2) EU Directive 2011/65/EC: This product may be considered out-of-scope when used for the intended design purpose in a Large Scale Fixed Installation (LSFI). Consult https://www.emerson.com/compliance for up-to-date product information. |
| | RoHS (China) | |

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