

# EngineMonitorPlus

Configurable Monitor for industrial engines with J1939 interface

## EngineMonitorPlus

### Highlights

The EngineMonitorPlus is a display and control device with CAN-bus interface, designed specifically for use on industrial engines. All common messages of the SAE J1939 standard are supported.

It provides simple configuration of displayed parameters, error (DM1) and service messages. This device can be configured and customized for the particular application.

The configuration is provided on three pages with two layout options on each page.

One quadrant layout values can be switched via buttons or time based. Values in the row view and four quadrant layout can be shown at one time.

In a password protected menu the engine control, additionally SCR / DPF regeneration and SCR / DPF warning lamp can be activated.

The software is available for two display variants. With IP67 grades both fits perfectly for rough industrial areas.



CAN bus data illustration

(left side: ifm CR0451, right side: DSE M835)

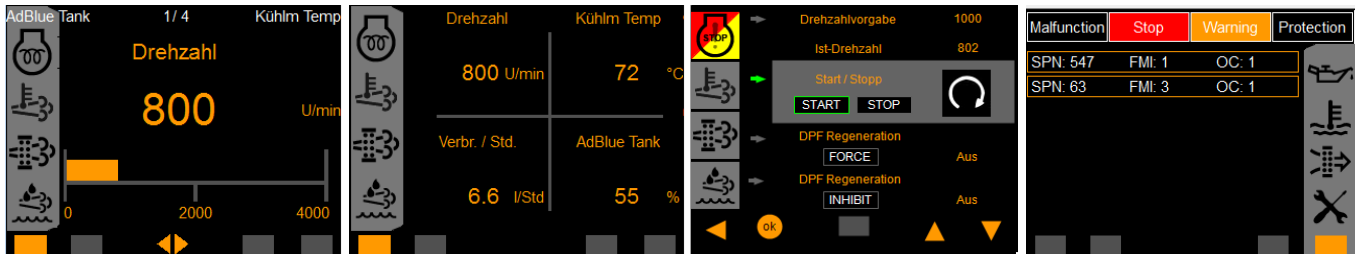
### Following information can be shown freely configurable:

|                                      |   |                                |                               |
|--------------------------------------|---|--------------------------------|-------------------------------|
| Accelerator Pedal Position           | Engine Fuel Delivery Pressure           | Engine Exhaust Gas Temp.       | Fuel Level                    |
| Engine Percent Load At Current Speed | Engine Oil Level                        | Engine Air Inlet Pressure      | Particulate Trap Lamp         |
| Accelerator Pedal                    | Engine Oil Pressure                     | Estimated Percent Fan Speed    | DPF Active Regen Status       |
| Actual Engine - Percent Torque       | Engine Coolant Pressure                 | AT Exht. Gas Temp. 2           | DPF Regeneration Inhibited    |
| Engine Speed                         | Engine Coolant Level                    | Auxiliary Temperature          | Exhaust High Temp Lamp        |
| AT Exht. Fluid Con.                  | Engine Fuel Rate                        | Auxiliary Pressure #1          | Catalyst Tank Level (AdBlue)  |
| Engine Total Hours of Operation      | Engine Instantaneous Fuel Economy       | Auxiliary I/O                  | Catalyst Temperature (AdBlue) |
| Total Engine Revolutions             | Engine Average Fuel Economy             | Wheel-Based Vehicle Speed      | % Soot                        |
| Engine Trip Fuel                     | Engine Throttle Position                | Charging System Potential (V)  | % Ash                         |
| Engine Total Fuel Used               | Barometric Pressure                     | Electrical Potential (Voltage) | Aftertr. Exhaust Gas Temp. 3  |
| Engine Coolant Temperature           | Air Inlet Temperature                   | Battery Potential (Voltage)    | Aftertr. Exhaust Gas Temp. 1  |
| Engine Fuel Temperature              | Engine Turbocharger Boost Pressure      | Trip Distance                  | Engines Desired Oper. Speed   |
| Engine Oil Temperature               | Engine Intake Manifold Temperature      | Total Vehicle Distance         | Engine Actual Ignition Timing |
| Engine Intercooler Temperature       | Engine Air Filter Differential Pressure | Hydraulic Temperature          | etc.                          |

# EngineMonitorPlus

Configurable Monitor for industrial engines with J1939 interface

## Display layouts:



One quadrant layout

Four quadrant layout

Command signals

Errorpage DM1

## Hardware specification



| Order no.:                    | <b>B12300-EMP-101-0451</b><br><b>B12300-EMP-101-9221</b>   | <b>B12300-EMP-101-M835</b>   |
|-------------------------------|--|--|
| Display model:                | ifm CR0451<br>ifm CR9221 - ClearGlass  | DSE M835   |
| Display size:                 | 2,8"   | 3,5"   |
| Resolution:                   | 320 x 240px  | 320 x 240px  |
| Dimensions (BxHxW):           | 87,5mm x 87,5mm x 37,7mm   | 112,5mm x 115mm x 49mm   |
| Protection class:             | IP 67 (front side, when installed,<br>otherwise IP 65)   | IP67   |
| Qualification:                | CE, e-Zulassung  | CE   |
| Operating temperature:        | -30 .. 80°C  | -40°C .. 85°C  |
| Operating voltage:            | 8-32V DC   | 8-35V DC   |
| CAN protocol:                 | SAE J1939 – ISO 11898 – HighSpeed-CAN / 5V Basis / 250 kBaud   |  |
| Supported industrial engines: | Caterpillar®<br>Cummins®<br>Daimler®, Deutz®<br>FPT / Iveco®<br>Hatz Diesel®   | John Deere®<br>MAN®<br>Perkins®<br>Scania®<br>VolvoPenta®<br><i>And others with standard SAE J1939</i> |
| Supported languages:          | German, English, French, Spanish, Italian  |  |
| <b>Accessories:</b>           |  |  |
| Connection:                   | <b>B12090-CPS-002-0500</b><br>M12 Cable socket tilted 5m 4pole CAN-<br>Cord with 120 Ohm Resistor (other<br>lengths available) | <b>4001954</b><br>Socket incl. pins<br>DEUTSCH DT16-A, 18pin   |
| Mounting frame:               | <b>4000333</b><br>Mounting frame for flat front panel<br>mounting (EC0403)   |  |
| RAM-Mounting:                 | <b>4000334</b><br>RAM-Mount Set 1" (EC0405)  | <b>4001951</b><br>RAM Mount + Adapter cover M835   |

Alle Daten bei 25°C Umgebungstemperatur, falls nicht anders angegeben. / All data at nominal input and 25° C ambient temperature, if not marked otherwise. ▪ Alle Daten dienen nur Informationszwecken und sind nicht als zugesicherte Eigenschaften aufzufassen. / All data for information purposes only, no assured characteristics. ▪ Technische Änderungen ohne vorherige Ankündigung sowie Irrtümer vorbehalten. / Technical modifications without notice and errors reserved. ▪ Belastung mit Extremwerten über einen längeren Zeitraum kann die Zuverlässigkeit beeinflussen. / Strain with extreme values for a longer period may affect the reliability. ▪ Alle Trademarks und Logos sind Eigentum der jeweiligen Unternehmen. / All trademarks and logos are property of the concerning companies. © b-plus mobile control GmbH • Nov-21 • Version: 4.3