



**InteliDrive  
WP**



**Order code: ID2C1000BEC  
Engine Controller**

# Datasheet

## Product description

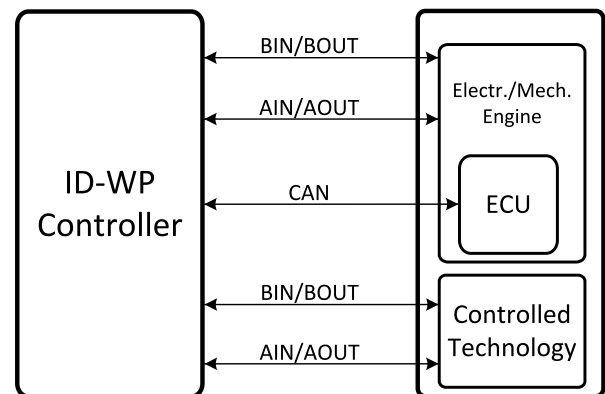
The InteliDrive WP is a cost effective and small form factor engine controller with higher IP grade, which features outstanding control, monitoring and protection for both mechanical and electronic diesel/gas engines – all in one unit. The controller is suitable for pumps, compressors, and other simple engine control requirements.

## Key features

- ▶ Engine controller for land-based and marine applications
- ▶ Control, monitoring and protection for both mechanical and electronic diesel/gas engines in one unit
- ▶ Automatic or manual start/stop of the engine
- ▶ Support of engines with Electronic Control Unit (ECU) - J1939
- ▶ Analog gauge (VDO, Datcon and others) output – operator friendly
- ▶ Smooth engine speed control
- ▶ 5 configurable binary inputs
- ▶ 9 configurable analog inputs
- ▶ 5 configurable binary outputs (2 relays - up to 10A)
- ▶ 1 configurable analog output 5 VDC
- ▶ Selectable protections alarm/shutdown

- ▶ 3 level of password protection
- ▶ USB port for programming
- ▶ 2 languages (user changeable)
- ▶ Real time clock and event history log
- ▶ Control functions: PID loop, Comparators, Timers
- ▶ Dust and water protection IP 65 (front and rear panel)
- ▶ Operating temperature: -20 to +70°C
- ▶ EN certifications

## Application overview



## Technical data

### Power supply

Power supply range	8-36 V DC
Power supply drop-out immunity	50 ms (from min. 12 V)
Power consumption	118 mA @ 8 V; 38 mA @ 36 V
Backup battery type	CR 1225, Encapsulated
Estimated backup battery lifetime	10 years

### Operating conditions

Operating temperature	-20 °C to +70 °C
Operating humidity	95 % w/o condensation (IEC/EN 60068-2-30)
Protection degree (front/back panel)	IP 65
Vibration	5-25 Hz, $\pm 1.6$ mm 25-100 Hz, $a = 4$ g
Shocks	$a_{max} 200$ m/s <sup>2</sup>
Storage temperature	-30 °C to +80 °C
Heat radiation	3.5 W
Weight	301 g

### Binary inputs

Number	5, non-isolated
Input resistance	4.2 k $\Omega$
Common pole	Positive, $V_S = 8-36$ V DC
Close/Open indication	0-2 V DC close contact 4 V - $V_S$ open contact

### Binary relay outputs (BO1, BO2)

Number	2, isolated
Output type	voltage free contacts
Maximum current	10 A
Maximum switching voltage	30 V DC, 250 V AC

### Binary open collector outputs (BO3, BO4, BO5)

Number	3, non-isolated
Output type	open collector
Maximum current	0.5 A
Maximum switching voltage	36 V DC

### Analog inputs - resistive

Number	3, non-isolated
Electrical range	0-2500 $\Omega$
Resolution	10 bits, 4 digits

Precision	$\pm 2$ % $\pm 10$ $\Omega$ out of measured value
Supported sensor types	Predefined: VDO 10Bar, VDO Temperature, VDO Fuel level User-defined: 30 points non-linear sensors can be defined by the user

### Analog inputs - voltage

Number	3, non-isolated
Electrical range	0-10 V
Resolution	10 bits, 4 digits
Input impedance	>100 k $\Omega$
Precision	$\pm 1$ % $\pm 100$ mV out of measured value
Supported sensor types	User-defined: 30 points non-linear sensors can be defined by the user

### Analog inputs - Current

Number	3, non-isolated
Electrical range	0-20 mA
Resolution	10 bits, 4 digits
Input impedance	180 $\Omega$
Precision	$\pm 1$ % $\pm 0.2$ mA out of measured value
Supported sensor types	User-defined: 30 points non-linear sensors can be defined by the user

### Communication

CAN	ECU, 250 kbps, max 200 m, Isolated
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### Magnetic pick-up

Voltage input range	2 - 70 V <sub>pp</sub>
Frequency input range	4 Hz to 10 kHz (min 2 V <sub>pp</sub> @ 4Hz - 4 kHz, 6 V <sub>pp</sub> @ 10 kHz)
Frequency measurement tolerance	0.2 %

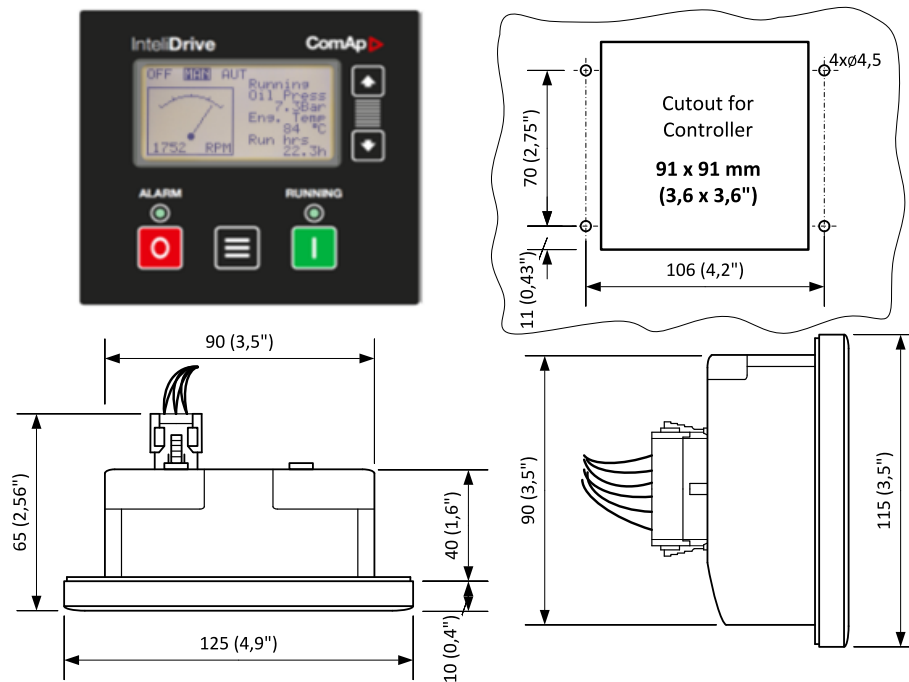
### D+

Excitation current	300 mA, during the engine start only
Charging fail threshold	80 % of U <sub>supply</sub>
Voltage range	0-60 V (max. 70 V)
Voltage accuracy	$\pm 0.1$ V

### Display

Type	Build-in monochromatic
Resolution	128 × 64 px

## Dimensions and mounting



**Note:** The controller is to be mounted onto the switchboard door. The requested cut-out size is 91x91 mm. Use the nylon screws and nuts delivered with the controller to fix the controller into the door.

## Certificates and standards

- ▶ EN 60068-2-1
- ▶ EN 60068-2-2
- ▶ EN 60068-2-6
- ▶ EN 60068-2-27
- ▶ EN 60068-2-30
- ▶ EN 61000-6-4
- ▶ EN 61000-6-2
- ▶ EN 60529 (IP65)



List of standards is available on: <https://webstore.iec.ch/>

