

iblos-IMPact-01

compact control device with 10 multifunctional I/Os

IBL·HYDRONIC

... the solution provider



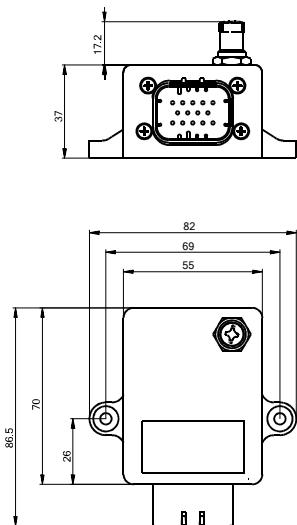
compact · flexible · customized

Control and I/O assembly group for vehicles, construction machines, agricultural and forestry machines, municipal devices and mobile specialized machines. Most suitable for controlling hydraulic control blocks, pumps and motors or as a CAN-I/O module. Also applicable as compact control ready for connection.

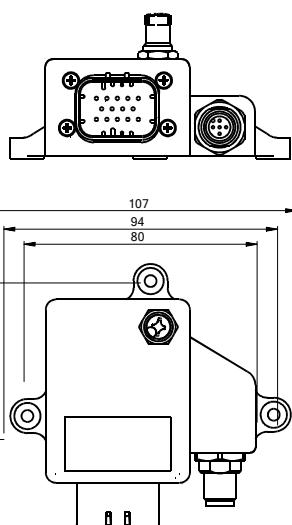
10 x MULTI-I/O PIN

	maximal available
Analoginput	10
Digitalinput	10
Digitaloutput	10
Frequenzinput	2
current-controlled PWM-Outputs	6
Frequenzoutputs	3

BASIC VERSION



OPTION M



Equipment

- 10 flexible multi-I/O
- digital and counter inputs
- 12-bit analog inputs
- 12-bit real-time current-controlled PWM outputs
- digital power outputs
- 5V reference voltage and 0V for sensors

Communication

- 1x CAN network
- CANopen-based PDO communication
- SAE J1939
- free-CAN

Protection features

- excess voltage and short circuit protected, cable break monitoring
- voltage-proof in 12 and 24 VDC vehicular electrical systems
- EMC according to mobile machine norms
- external hardware watchdog

Connection

- Multi-I/O Connector
- optional M12-Connector for CAN und electronics supply



Housing

- additive in-house production
- standard and application-specific housings
- IP66K/IP68, fully cast
- customized coloring

Programming

- freely programmable in C
- Softwaretools for Applications
- Softwareupdate via M8 programming socket or CAN

Parametrization and diagnostics tool

- iblos-CAN-master-pro
- iblos-CLOUD-master

OPTION M

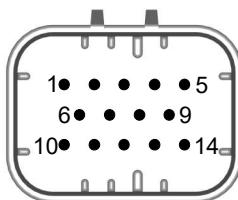
pins CAN and electrical supply via M12 pin
enable signal external hardware shutdown of outputs

IN-/OUTPUTS

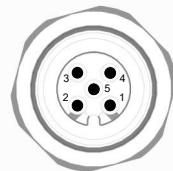
Digital-Output	3A, protected against short circuit, idle running, reverse polarity, overcurrent, overvoltage and excess temperature, suitable for inductive load, diagnostics feature
PWM-Output	3A, 12bit resolution, current-controlled, protected against overcurrent, overvoltage and excess temperature, suitable for inductive load, also available for on/off valves, diagnostics feature
Analoginput	protected up to 50VDC (permanent), also available as a digital input, 12 bit resolution, 0 to 10 VDC: input impedance 30 kOhm, 0 to 20 mA: input impedance 255 kOhm (hardware configuration)
Reference supply	5V, max 100mA
Digitalinput	protected up to 50VDC (permanent), 30kOhm input impedance positive switching, adjustable activation and deactivation levels
Counter	protected up to 50VDC (permanent), input impedance 30kOhm positive switching, also available as a digital input, adjustable activation and deactivation levels, frequency max 5 kHz
enable (optionM)	input to enable/disable outputs externally, protected up to 50VDC (permanent), input impedance 30 kOhm, positive switching, adjustable activation and deactivation levels

CONNECTION

Basic version



option M



additional M12 5pole, female
 1: enable signal
 2: Vdd Electronics, max 1A
 3: 0V, max 1A
 4: CAN high
 5: CAN low



TECHNICAL PROPERTIES

Electrical Connection

- power supply 12/24 VDC (9 to 32 VDC)
- load dump protection, suitable for vehicular electrical systems
- voltage internally monitored
- external quick-acting fuse 10A

Housing

- additively produced PA12, IP66K/IP68, cast
- installation screw flange

Connection

- AMPSEAL 14-pin, mat. nr. 776273-1
- option M: M12, 5-pin

Programming interface

- C2/JTAG M8, 4ole or
- CAN

Ambient temperature

-40° C ... +80° C

Mechanical strength

- Vibrations DIN IEC 68-2-6/mobile devices
- Continuous shock DIN IEC 68-2- 29/Eb 250-6-1000/1 (25g)
- Shock DIN IEC 68-2-27 / Ea 500-6-18/4 (50g)

EMC-Norms

- agricultural machines DIN EN ISO 14982: 2009
- construction machines DIN EN 13766-1/2: 2018-12
- interferences on the line ISO 7637: 2009
- load dump ISO 16750-2: 2012-11-01

Data interfaces

1xCAN-network

Watchdog

external hardware-Watchdog

Software

- freely programmable in C
- ePTS-softwaretools for applications

VERSIONS

IMPact 01(M)-A			
PIN	alternatively		
1	VDD	O	O
2	AI7	DO7	0V o. 5V**)
3	AI8	DO8	0V o. 5V**)
4	AI9	DO9	0V o. 5V**)
5	AI10	DO10	0V o. 5V**)
6	AI1	DO1	CTR1 *)
7	AI2	DO2	CTR2 *)
8	AI3	DO3	CTR1 *)
9	AI4	DO4	CTR2 *)
10	0V	O	O
11	AI5	DO5	O
12	AI6	DO6	O
13	CAN low	0V **)	O
14	CAN high	5V **)	O

IMPact 01(M)-B				
PIN	alternatively			
1	VDD	O	O	O
2	PWM1-	O	O	O
3	PWM2-	O	O	O
4	PWM3-	O	O	O
5	PWM4-	O	O	O
6	PWM1A+	DO1	AI1	CTR1 *)
7	PWM2A+	DO2	AI2	CTR2 *)
8	PWM3+	DO3	AI3	CTR1 *)
9	PWM4+	DO4	AI4	CTR2 *)
10	0V	O	O	O
11	PWM1B+	DO5	AI5	O
12	PWM2B+	DO6	AI6	O
13	CAN low	0V **)	O	O
14	CAN high	5V **)	O	O

IMPact-01(M)-C			
PIN	alternatively		
1	VDD	O	O
2	AI7	DO7	0V o. 5V**)
3	AI8	DO8	0V o. 5V**)
4	AI9	DO9	0V o. 5V**)
5	AI10	DO10	0V o. 5V**)
6	Freq Out 1	O	O
7	Freq Out 2	O	O
8	Freq Out 3	O	O
9	AI4	DO4	CTR2 *)
10	0V	O	O
11	AI5	DO5	O
12	AI6	DO6	O
13	CAN low	0V **)	O
14	CAN high	5V **)	O

IMPact-01(M)-D				
PIN	alternatively			
1	VDD	O	O	O
2	PWM1-	O	O	O
3	PWM2-	O	O	O
4	AI9	DO9	0V o. 5V **)	O
5	AI10	DO10	0V o. 5V **)	O
6	PWM1A+	DO1	AI1	CTR1 *)
7	PWM2A+	DO2	AI2	CTR2 *)
8	AI3	DO3	CTR1 *)	O
9	AI4	DO4	CTR2 *)	O
10	0V	O	O	O
11	PWM1B+	DO5	AI5	O
12	PWM2B+	DO6	AI6	O
13	CAN low	0V **)	O	O
14	CAN high	5V **)	O	O

*) max 2 Counter can be defined

**) Hardware Option, see also option M