Sontheim

COMhawk®

The new generation of control devices

We live electronics!

COMhawk®

COMhawk® is a control device for communication and diagnostic tasks. In addition to the standard interfaces such as CAN and Ethernet the module also offers a WLAN interface. The variety of interfaces and the extremely rugged IP69K housing opens the module various fields of applications in the automotive and automation area.

Key Features

- **Powerful 32-bit microcontroller**
- **3× CAN interface acc. to ISO 11898 (opt. 4× CAN)**
- **1× Ethernet, 10/100 Mbit/s**
- **WLAN acc. to IEEE 802.11 b/g/n**
- **Data-logging**
- **Protection class IP69K**
- **Vibration protected**

Housing and interfaces

The new COMhawk® is equipped with up to four CAN channels, Ethernet, Wi-Fi and optional two digital inputs and one digital output. In addition, great emphasis was placed on an extremely robust and durable design to meet the current safety standards. The control device is designed for the use outside the cabin of a vehicle and is vibration tested. A temperature range of –40 °C to +85 °C and the compact housing with protection class IP69K are ensuring an extensive protection.

Wide field of applications

A powerful 32-bit microcontroller allows even the most demanding applications and thanks to the built-in NAND flash memory of up to 16 GB amounts of data can be stored. Thus COMhawk® can be used both, in the automotive as well as in the automation industry for a variety of communication and diagnostic tasks such as a communication interface, gateway, event logger or telemetry node.

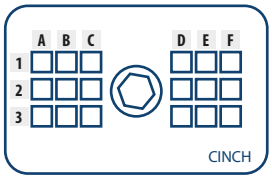
Technical Data

CPU	32-bit microcontroller, SPC 5123 400 MHz
RAM	32 MB up to 256 MB
Memory	16 MB up to 16 GB NAND Flash Memory
CAN	3× CAN acc. to ISO 11898 (optional up to 4× CAN)
Ethernet	1× Ethernet, 10/100 Mbit/s
WLAN	1× IEEE 802.11 b/g/n
IOs	optional 2× DI optional 1× DO
Operating system	RTOS (µC/OS-II) or LINUX
Plug	18-pole Automotive Plug
Housing	IP69K
Dimensions (l×w×h)	approx. 130 mm × 124 mm × 38 mm
Weight	375 g
Operating temperature	–40 °C up to +85 °C
Storage temperature	–40 °C up to +85 °C
Power supply	6 – 32 V DC

Comprehensive software support

The freely programmable and real-time capable ECU system can be programmed by the user application specifically. Over a configurable data interface for example an individual configuration of the interfaces or the structure of an application could be solved expeditiously. Furthermore control loops can be mapped easily over an integrated script interpreter. Another advantage is the reusability of this type of programming, whereby future work can even be more efficient. The user profits from a complete development environment.

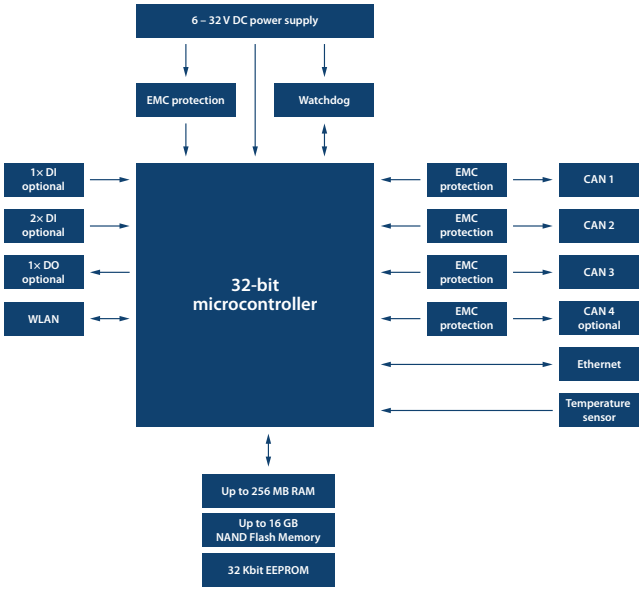
Pin assignment



COMhawk®

1A	Ubat
1B	GND
1C	LAN_SHLD
2A	DIG_IN 1 (opt.)
2B	LAN_RX–
2C	LAN_RX+
3A	DIG_IN 2 (opt.)
3B	LAN_TX–
3C	LAN_TX+
1D	DIG_OUT 1 (opt.)
1E	CAN4_High (opt.)
1F	CAN4_Low (opt.)
2D	CAN3_Low
2E	CAN2_Low
2F	CAN1_Low
3D	CAN3_High
3E	CAN2_High
3F	CAN1_High

Block Diagram



Order information

V930238200	COMhawk®

Mobile Automation

Industrial Automation

Diagnostics

Connectivity

We are looking forward to your enquiry!

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