

# Control Unit

## µMIC.200

**Most robust, fast, secure. To be programmed with Node-RED or in C/C++.**

This freely programmable control unit **µMIC.200** is equipped with an ARM Controller which may be clocked to a maximum of 1 GHz. The module provides 512 MByte RAM as well as 4 GByte Flash memory which may be extended by a microSD-Slot. Its maximum power consumption is 4 Watts.

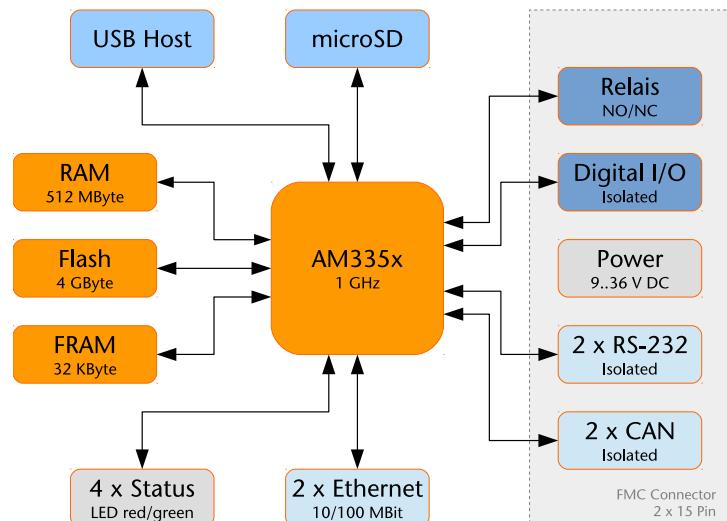
The control unit can communicate with peripheral devices via double Ethernet, CAN or serial interfaces. Additional peripherals (e.g. WLAN adapter) may be connected via USB.

Equipped with eight configurable digital in-/outputs, a relay, four freely controllable LEDs and a real-time clock the **µMIC.200** may be used in a multitude of different applications.



## Features

- 2 x Ethernet interface (IEEE 802.3)
- 2 x CAN interface (isolated)
- 2 x RS-232 interface (isolated)
- Real-time clock (buffered without battery)
- Cortex-A8 CPU with 1 GHz clock frequency
- 4 GByte Flash and 512 MByte DDR3 RAM
- FRAM memory for remanent data
- Memory extendable via microSD card
- Power supply voltage 9..36 V DC
- Operating temperature -40 °C..+85°C
- Max. power consumption max. 4 Watt
- Real-time Linux operating system (Kernel 4.1.18)
- Integrated CANopen Master functionality



<b>Technical Data</b>	<b>µMIC.200</b>
<b>Power supply voltage</b>	9..36 V DC, reverse polarity protected COMBICON plugs
<b>Power consumption</b>	max. 4 W
<b>Potential isolation</b>	CAN / control voltage: 1kV <sub>eff</sub> RS-232 / control voltage: 1kV <sub>eff</sub>
<b>Operating temperature</b>	-40 °C..+85 °C
<b>CPU</b>	1 GHz Sitara™ ARM® Cortex®-A8 32-Bit RISC Processor
<b>Memory</b>	512 MByte DDR3 RAM / 4 GByte Flash / microSD card slot 32 KByte FRAM
<b>Ethernet</b>	Two 10/100 Mbps Ethernet IEEE 802.3 RJ45 connectors
<b>CAN</b>	Two CAN / CAN 2.0A and 2.0B, 50 kBit/s .. 1 MBit/s COMBICON plugs
<b>RS-232</b>	Two serial RS-232 interfaces, COMBICON plugs
<b>USB Host</b>	USB 2.0 Port for connection of various USB devices
<b>Realtime Clock</b>	Buffered via capacitor, buffer time approx. 300h
<b>I/O signals</b>	Eight digital I/O, input / output configurable via software, max. 1 A per output, one relay (changeover), 250 V AC, 5 A
<b>Protection class</b>	IP20
<b>Casing</b>	Alu/plastics DIN-rail casing 61.8 x 68.6 x 105.0 mm (B x D x H)
<b>EMC</b>	EN 61000-6 compliant
<b>Operating system</b>	Linux, Kernel 4.1.18

<b>Item number</b>	<b>Designation</b>
<b>200.00.005</b>	µMIC.200 Freely programmable control unit for DIN-rail mounting in metal casing. The ARM based platform is programmed with Node-RED or in C /C++.