HARTING MICA® CISS Complete IIoT Starter Kit - Data Sheet

Advantages

- All hardware and software components included to start your industrial condition monitoring application in under 10min
- Built and Tested in accordance to industry transportation standards for the harshest conditions
- Embedded non-proprietary vendor agnostic, open dynamic, scalable future proof middleware software stack architecture
- Robust, adaptable, upgradeable hardware
- IP-rated Industrial connectors
- Power over Ethernet 48 V PoE or 12/24 V DC for quick network deployment
- Integration of IP and non-IP devices creating an open best of breed architecture at the edge level

General description

- MICA is an extremely robust IoT edge computer hardware/software that is engineered and designed to meet the standards, and requirements for critical infrastructures in Data Centers, Automation, Oil & Gas, Industrial Automation, Facilities, and Healthcare environments. MICA is tested in accordance to IP67 standards providing a modular world class hardware chassis.
- MICA hardware components are carefully engineered for an extensive life cycle in critical and harsh environments where reliability and uptime are crucial.
- MICA modular hardware and software design enables IoT architects, Integrators, development engineers and end-users, to unleash their systems potential. This is accomplished through a powerful blend of a web-based non-proprietary open source architecture.
- MICA applications include, Asset Tracking, Condition Monitoring/Control, and System Integration-Digital Retro-fits/migrations of proprietary protocols.
- The BOSCH “Connected Industrial Sensor Solution” (CISS) boasts 8 different environmental sensors in one: temperature, humidity, accelerometer, pressure, light, acoustic, gyroscope, and a magnetometer.

Technical characteristics (MICA)

System performance	1 GHz ARM processor 1 GB RAM 4 GB eMMC up to 32 GB Flash (via Micro SD Card)
Interfaces	Ethernet (TCP/IP) 10/100 Mbit/s; Full Spec. 802.3 2 USB A Push-Pull
Inputs / Outputs	up to 8 configurable IOs (12 / 24 V)
Power supply	
Power supply	12/24 V DC (± 5 %) / Power over Ethernet (PoE)
Current consumption	max. 500 mA
Diagnosis (LED)	2 LEDs to visualize the device status
Protocol	Embedded middleware functionality 1.1 standard – Web services – http telegrams – TCP telegrams – UDP telegrams – MySQL database support – MQTT
Operating system	Linux (Kernel 3.x.x)
Design features	
Material of housing	corpus: Aluminum, powder coated front cover: fiberglass reinforced high performance plastic
Dimensions (W x H x D)	132 x 86 x 35 mm
Installation on DIN rail	DIN rail mounting kit (see optional accessories)
Environmental conditions	
Operating temperature	-25 °C ... +75 °C
Storage temperature	-25 °C ... +85 °C
Relative humidity	5 % ... 95 % (non-condensing)
Vibration	EN 60 068-2-6 10 Hz to 150 Hz: 0.075 mm / 1g
Shock	EN 60 068-2-27 Acceleration: 30 g
Norms & safety	
EMC	EN 301 489
Low voltage	EN 60 950
Human exposure	EN 50 364
RoHS compliant	
Railway	tested according to EN 50155 (Q2 2016)

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Description	Part number	Drawing	Dimensions in mm
HARTING MICA CISS Complete IIoT Starter Kit	73460000007		
Kit Components:			
HARTING IIC MICA USB	2095000000200		
M12 X coded PushPull cable assembly,1m	09488223756010		
M12 Cable Assembly A-cod st/- m/- 1,0m	21348400C79010		
BOSCH "Connected Industrial Sensor Solution" (CISS)			
HARTING USB PushPull CISS-cable			
12V, 1A Power Supply			