BCS-M100 Edge Computer

Quad-core fanless rail automation computer

Features and Benefits

- ARMv8 Cortex-A53 64-bit SoC @ 1.2GHz
- 100Mbps Ethernet port
- EtherNet/Modbus RTU/OPC UA industrial protocol supported
- ADC/DAC/Analog/USB/UART/RS-485 COMM via iO-Grid collector rail
- The AI/DI input modules feature flexible extensibility
- 5 VDC isolated power input
- 0 to 50°C system operating temperature range
- Build-in with GoodLinker Cloud of War Room.
- Display SCADA on GoodLinker official website and mobile APP
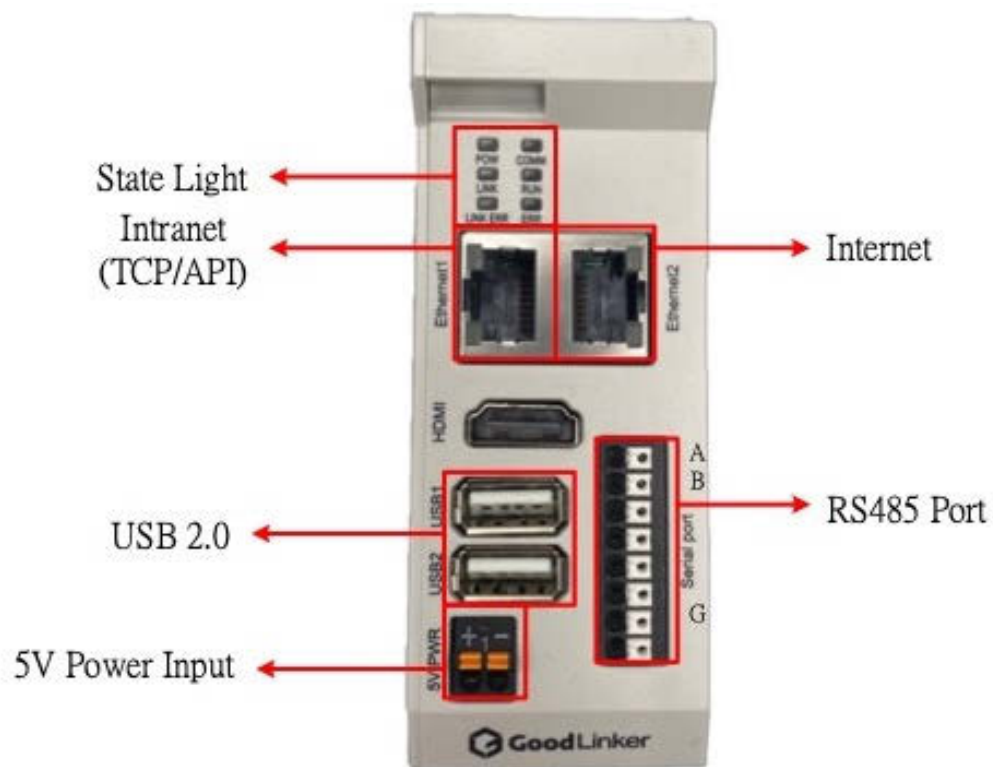
Introduction

The BCS-M100 rail mountable, fanless, ARM embedded computer uses Broadcom 2711 Quad-core processor, feature the most reliable I/O design to maximize connectivity, meeting requirements of different scenarios.

The BCS-M100 supports the GoodLinker LASSIE IIoT Platform for industrial equipment status monitoring, HMI monitoring, environment monitoring, and alerts. Close monitoring of the industrial equipment status makes the production line easier to recover from errors and provides the SCADA dashboard display on GoodLinker official website and mobile APP.

The BCS-M100 is an AWS qualified device for IoT. It can upgrade old types of machines to smart devices by data acquisition, data computing, and has been tested to work with AWS IoT Core services for Industrial IoT applications.
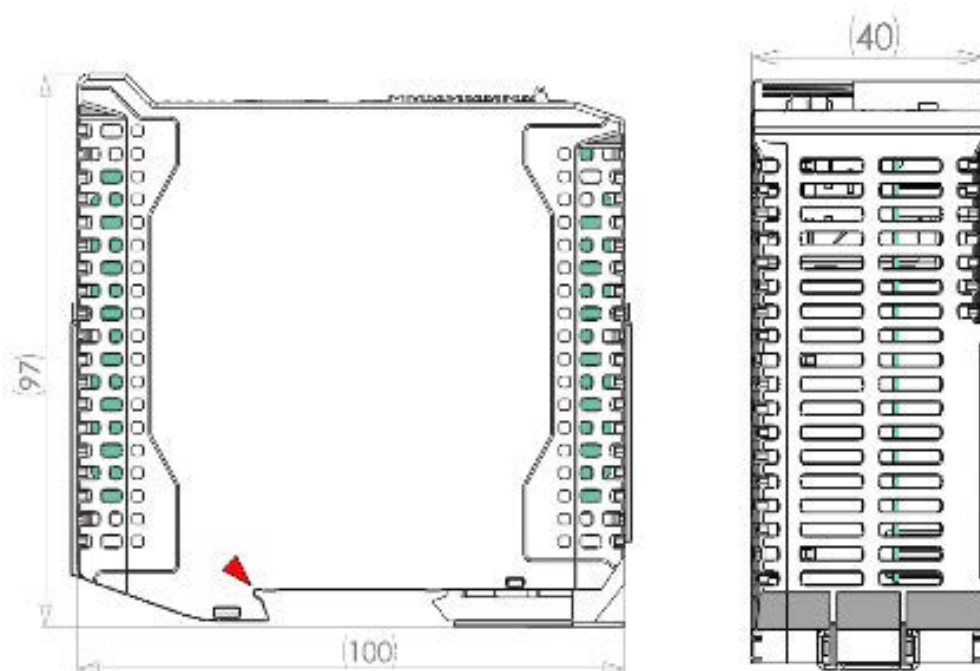
Appearance

BCM-100

State Light

Intranet
(TCP/API)

Internet

USB 2.0

RS485 Port

5V Power Input

Dimensions

BCM-100

Unit: mm

Specifications

Computer

CPU	Cortex-A53, 64-bit SoC @ 1.2GHz
GPU	VideoCore IV with OpenGL ES 1.1, 2.0
RAM	ELPIDA B8132B4PB-8D-F 1GB LPDDR2
Memory	32GB eMMC Flash memory
OS	ArchLinux (Linux Kernel: 4.19.xx)

Computer Interface

Display	1 x HDMI
USB	**2** x USB 2.0
Ethernet	1 x 100Mbps Port (SMSC LAN9514-JZX)
Indicator	6 x LED for System status
COMM	1 x RS-485 via iO-Grid

Ethernet Interface

Ethernet Ports	Auto-sensing 10/100 Mbps ports (RJ45)

Serial Interface

Serial Ports	1 x RS-485
Data Bits	7、8
Parity	Even、Odd、None
Baud rate	1.2K、2.4K、4.8K、9.6K、14.4K、19.2K、38.4K、57.6K、115.2K

Serial Signals

RS485-2w	Data+, Data-, GND

LED Indicators

POW	Power
COMM	Module/Modbus connection
LINK	Server connection
RUN	System Run
LINK ERR	Data upload error
ERR	System operation Error

Physical Characteristics

Housing	Polycarbonate
Dimensions	40mm x 100mm x 90.5mm (W x D x H)
Weight	130.6g
Installation	DIN-rail mounting

Power Supply

Input Voltage	5V
Input Current	1A
Power Consumption	5W

Mechanical & Environmental

Operating Temp.	0°C to +50°C (32°F to +122°F)
Storage Temp.	-20°C to +75°C(-4°F to +167°F)
Storage Temp.	10% to 90%, non-condensing
Dimensions	40mm x 100mm x 90.5mm (W x D x H)
Weight	130.6g
Installation	DIN-rail mounting