

Features

- High-Performance MQTT Broker Service
- Automated Failover
- Intuitive Web UI Remote Management
- Diverse Database Integration
- Data Retransmission & Auto-Backfill

BRK-2841M

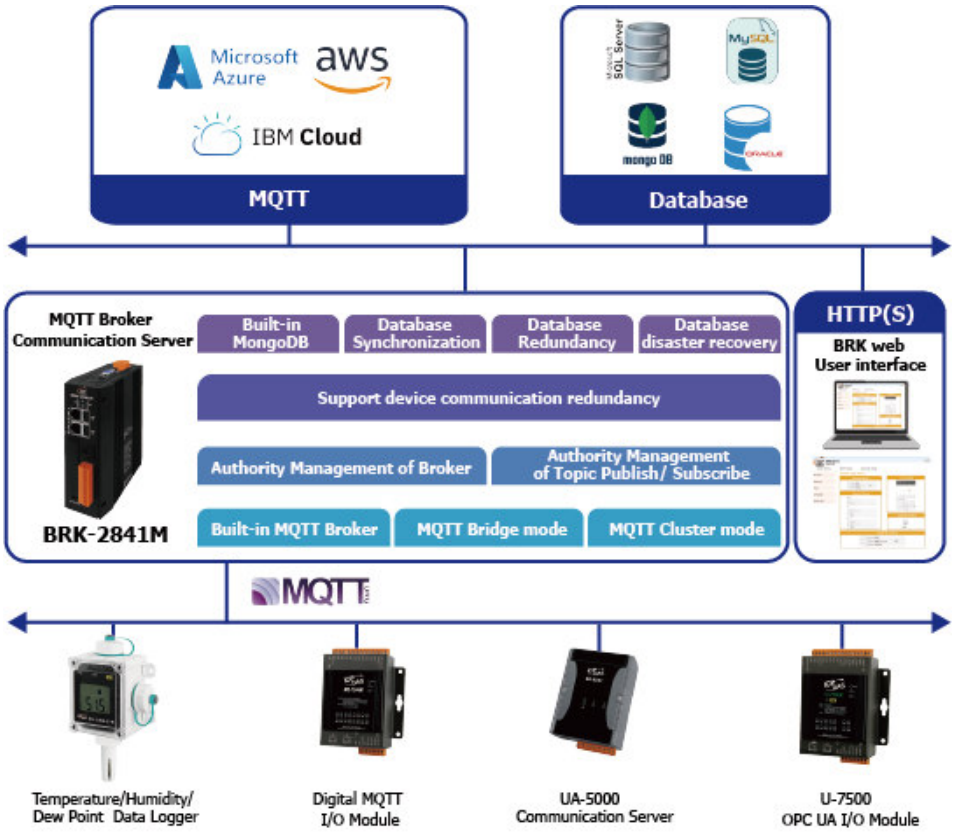
BRK Series IIoT MQTT Communication Server

Quad-core ARM CPU and 2 Ethernet Ports

Introduction

BRK Series is a Communication Server that specially provides Broker function of MQTT protocol for MQTT message distribution and concentrator in M2M and Industrial Internet of Things environments. The BRK Series is compatible with the MQTT version V.3.1, V.3.1.1 and V.5.0 protocol. It supports many functions such as QoS message quality mechanism, retains mechanism, identity authentication, communication encryption, last message (Last Will), and bridge. And support Web UI setting method to quickly set up BRK functions. It can reduce the burden of setting up the server by user oneself and reduce the maintenance cost. Besides, BRK Series provides Bridge, Cluster, Load Balancer, and High Availability functions. Composing multiple BRK Series to form a better Redundancy system can prevent field systems from stopping services due to hardware or network failures.

System Architecture



Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

Hardware Specifications

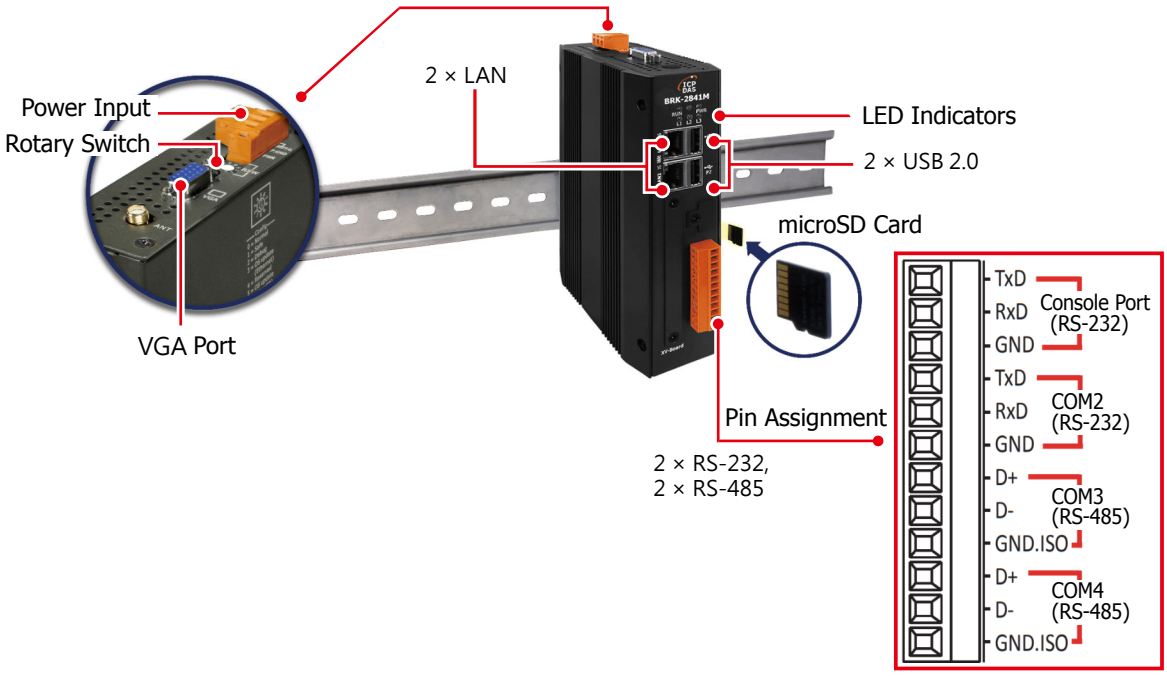
Model	BRK-2841M
Main Unit	
CPU	Quad-core ARM CPU, 1.6 GHz/Core
System Memory	DDR4 SDRAM 2 GB
Storage	eMMC 8 GB
Non-Volatile Memory	FRAM 64 KB, MRAM 128 KB
Ethernet	
Ports	RJ-45 x 2, 10/100/1000 Base-TX (Auto-negotiating, Auto MDI/MDI-X)
Power	
Input Range	+12 ~ +48 VDC
Consumption	10 W
Environmental	
Operating Temperature	-25 ~ +70 ° C
Storage Temperature	-40 ~ +80 ° C
Humidity	10 ~ 90% RH,Non-condensing

Software Specifications

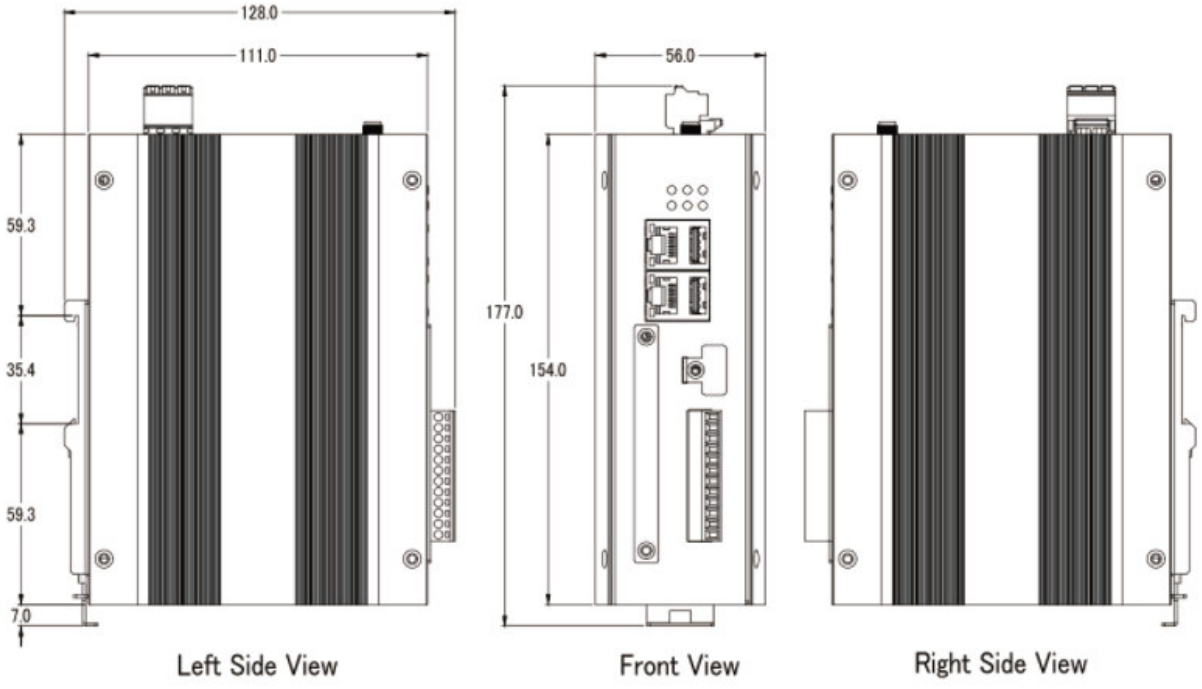
Model	BRK-2841M
Function	
High-Performance MQTT Broker Service	Fully supports MQTT V.3.1 / 3.1.1 / 5.0 protocols.
	Equipped with QoS, Retain mechanisms, and Last Will functions.
	Built-in strict user authentication and communication encryption mechanisms. Supports Bridge and Cluster technologies, facilitating the construction of large-scale IoT networks.
Automated Failover	Supports High Availability (HA) architecture and Virtual IP configuration.
	Real-time health status monitoring.
	Automatically switches to the backup server within 10 seconds upon host failure, ensuring zero downtime.
Intuitive Web UI Remote Management	Built-in graphical web interface; no additional setup software required.
	Fast access and parameter configuration via standard web browsers, significantly reducing O&M costs.
Diverse Database Integration	Supports direct MQTT data logging into remote databases.
	Fully compatible with mainstream databases including MySQL, SQL Server, and MongoDB. Effortlessly bridges OT edge devices with IT analysis platforms, enabling real-time data aggregation.
Data Retransmission & Auto-Backfill	Automatically redirects data to an internal SD card during network instability. Supports up to 14 days of buffered local data storage.
	Sequentially auto-backfills cached data into the database when the connection is restored, ensuring absolute data and chronological integrity.

Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

Appearance



Dimensions (Units: mm)



Ordering Information

BRK-2841M CR	IIoT MQTT Communication Server (Metal), with Quad-core ARM CPU and 2 Ethernet Ports(RoHS)

Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000