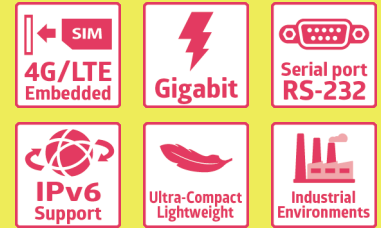


## Billion M100



## Advanced Industrial 4G/LTE Router

### Overview

The Billion M100 Advanced Industrial 4G/LTE Router is a high performance fixed wireless platform enabling real-time 4G Cellular data connectivity for your existing serial devices and Ethernet network. The M100 provides a reliable and cost-effective alternative solution for business continuity. The platform can served as the primary connection or backup connection when wired connections fail, are unavailable or non-existent.

### High Availability and Network Resilience

The M100 features two Gigabit Ethernet interfaces and a RS-232 Serial interface enabling wireless data connectivity for a broad range of applications and vertical machine-to-machine (M2M) market segments. Intelligent software supports configurable LAN/WAN options, and enterprise level functionality such as: SPI firewall, Quality of Service (QoS), auto failover for unparalleled uptime and network redundancy.

### Designed for Industrial Environments

The M100 passed UL Class 1 D2 certification, purpose-built for continuous operation in harsh environments, the M100 supports an extended operating temperature range from -20 to 60° C (-4 to 140° F) and a flexible input voltage range of 9-56V DC making it suitable for diverse environments and applications. To enable simple, reliable and efficient integration the ultra-compact, lightweight and low profile design incorporates highly flexible mounting options to ensure that the device and can be easily mounted discretely anywhere.

### High performance & reliability and easy to manage and access

- Offers 4G/LTE and/or Ethernet IP broadband connectivity (3G Fallback is optional)
- Automatic failover for network resilience and reliable connectivity
- Option GPS for real-time asset tracking and location data-based application\*4
- Local and Remote management via Web GUI, SNMP or CWMP(TR-069)

### Serial Port (DB-9)

- RS-232
- Supports Modbus/TCP, Telnet Server, SSH Server, UDP Server/ Client, TCP Server/ Client

### Ultra-Compact and Lightweight Design

- Small form factor M2M with affordable price
- Fits in the palm on your hand
- Simplified deployments, easily mounted discretely anywhere

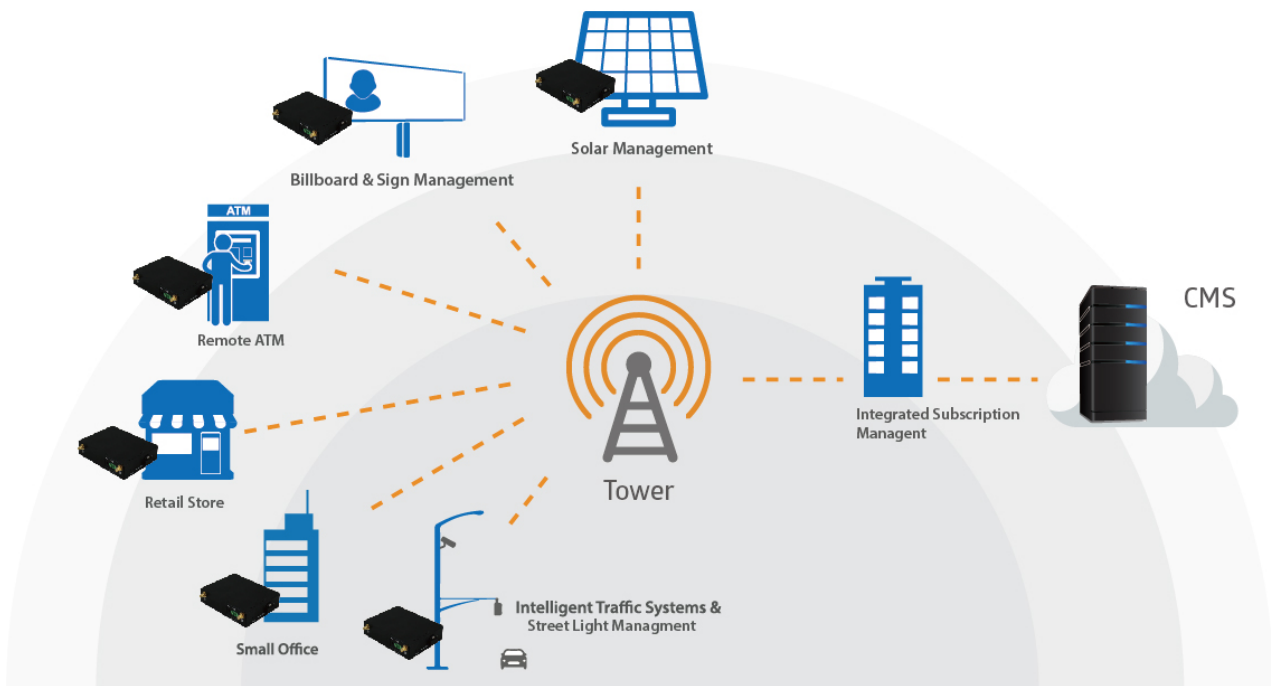
### Designed for Industrial Environments

- Hardened enclosure with Industrial-graded components
- Extended Temperature Range
- Flexible Input Voltage selection
- UL Class 1, Division 2 Certified

### Ideal Solution for

- Digital signage, Remote surveillance, Vending Machines, Retail Point-of-Sales (PoS), Remote patient care/maintenance services, SCADA

## Application Diagram



## Features & Specifications

### ■ Availability and Resilience

- Dual-WAN Interfaces (LTE, GbE WAN)

### ■ Embedded 4G/LTE\*1

- Embedded high performance 4G/LTE module
- Frequency bands and data rate depend on equipped LTE module.

### ■ Network Protocols and Features

- Dual WAN Failover/ Failback
- Dual WAN Load Balancing
- IPv4, IPv6, IPv4/IPv6 dual stack\*2
- Dual APN\*3
- Keep Alive
- IP Pass-Through
- NAT, Virtual Server and DMZ
- Static Routing, Dynamic Routing (RIP v1/v2, OSPF, BGP)
- SNTP, DNS relay and DDNS
- Universal Plug and Play (UPnP) compliant
- Supports DHCP server/ client/ relay

### ■ Firewall

- Built-in NAT Firewall
- Stateful Packet Inspection (SPI)
- Prevents DoS attacks including Land Attack, Ping of Death, etc.
- Access Control
- IP Filtering, MAC Filtering, URL Filtering
- VPN Pass-through

### ■ Virtual Private Network (VPN)

- IPSec
- PPTP
- L2TP
- GRE
- OpenVPN

### ■ Serial RS-232

- DCE, DB-9
- Modbus/TCP, Telnet Server, SSH Server, UDP Server/ Client, TCP Server/ Client

### ■ Global Navigation Satellite System(GNSS)\*4

- GPS system

### ■ Management

- Password protection for system management
- Web-based GUI for remote and local management
- Firmware upgrades and configuration data upload and download via Web-based GUI
- TR-069 (CWMP)\*2, SNMP
- 3G/ 4G LTE Usage Allowance
- Remote System Log monitoring
- Scheduling Auto-Reboot
- Physical layer/protocol diagnostic test tool

### ■ Hardware Specifications

#### Physical Interface

- WAN: 4G/LTE (and/or ETH WAN option)
- RS-232(DCE, DB-9): one(1) port
- Ethernet LAN: 2-port 10/100/1000Mbps auto-crossover (MDI/ MDI-X) switch
- SIM Card: one(1) slot
- Reset Button
- Power Connector: 2-pin connector
- LED Indicators
- Antenna:
  - 4G/LTE: two(2) detachable antennas
  - GPS: one(1) detachable antenna(option\*4)

#### Power Specifications

- Input: DC 9V~56V

#### Physical Specifications

- Dimensions: 4.29"(W) x 1.17"(H) x 3.43"(D)  
(109mm x 29.7 mm x 87 mm)

#### Operating Requirements

- Operating: -20°C to 60°C (-4°F to 140°F)
- Humidity: 20 ~ 95% non-condensing

### Notes:

1. The 4G LTE is dependent on your local service provider.
2. Only upon request for Telco/ ISP tender projects.
3. Dual APN is not supported on some specific SKU, please confirm it with our sales.
4. The support for GPS and/or GLONASS functions depends on the equipped module's capabilities.
5. Specifications in this datasheet are subject to change without prior notice.