



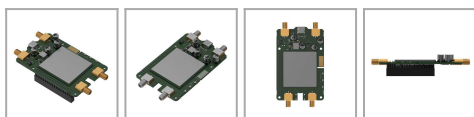
TELTONIKA CALYX 4G, EBD021, EMBEDDED CELLULAR RASPBERRY PI HAT+



link to the product:

<https://www.batna24.com/gb/p/lte-5g/teltonika-calyx-4g-ebd021-embedded-cellular-raspberry-pi-hat>

Price: **149.76 zł** gross / 121.76 zł net



Manufacturer: TELTONIKA

Referention number: DNXGKMMKJRMMMN

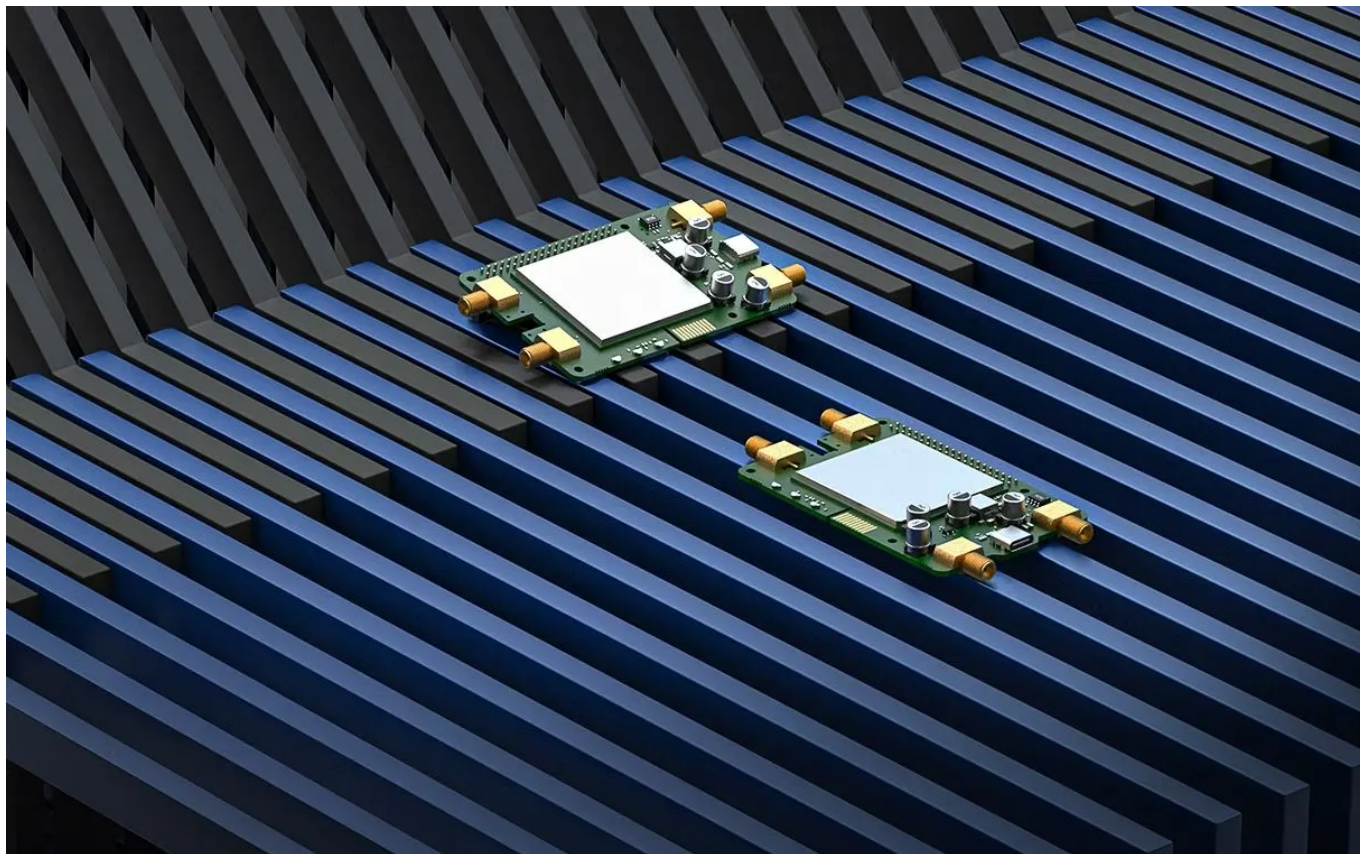
Information:

Teltonika Calyx 4G (EBD021) is an industrial HAT+ module for Raspberry Pi 4 and 5, providing stable 4G LTE Cat 4 connectivity with speeds of up to 75 Mbps. Thanks to mounting on GPIO, it creates a compact, reliable design, replacing USB modems that are prone to failure. GPIO-based reset and wake-up support makes remote management easier, while the wide operating temperature range from -40°C to 75°C is suitable for demanding applications. The module enhances the security of IoT transmissions, supports PCM audio and offers SMA connectors for external antennas. It is a complete solution for telemetry, monitoring and edge projects, ready for rapid deployment.

Full product description

4G LTE Connectivity for Raspberry Pi 4 and 5

Teltonika Calyx 4G (EBD021) is a **HAT+** expansion module that provides stable mobile network access for **Raspberry Pi 4 and 5** single-board computers. The device eliminates the problem of no Wi-Fi coverage or access to Ethernet infrastructure in industrial and edge projects. Thanks to direct mounting on the GPIO pins, the module creates a compact design, replacing external and less stable USB modems with a professional system solution.



Key advantages of the Teltonika Calyx 4G module

- **4G LTE Cat 4** modem – provides data transfer of up to **75 Mbps**, ensuring smooth telemetry and monitoring.
- **HAT+** standard – guarantees full compatibility with the latest Raspberry Pi versions and saves space in the enclosure.
- **GPIO** control – offers modem reset and wake-up functions, increasing system autonomy in challenging locations.
- Thermal resistance from **-40°C to 75°C** – withstands operation in extreme industrial conditions and outdoor control cabinets.
- **PCM audio** support – enables digital audio transfer, extending functionality to voice gateways and two-way communication.
- **USB Type C** connector – speeds up data transfer between the central unit and the modem, ensuring connection stability.



Stable 4G LTE Cat 4 data transmission

At the heart of the device is a proven **4G LTE Cat 4** modem, which offers data download speeds of up to **75 Mbps**. This solution is an optimal choice for IoT deployments requiring constant network access without the need to invest in costly 5G infrastructure. The module supports a wide range of bands (including **B1, B3, B7, B20, B28**), ensuring global coverage and strong signal penetration indoors and in industrial areas.



Security and network isolation

Using cellular connectivity with **Teltonika Calyx 4G** increases the security of transmitted information by creating a dedicated, encrypted data path. Separating IoT traffic from the main corporate network protects critical assets from unauthorised access. As a result, the module is ideal for real-time telemetry transmission and remote sensor applications, where data confidentiality is a project priority.



GPIO integration and automatic reset function

The **EBD021** module uses dedicated **GPIO** pins to fully manage modem operation from the Raspberry Pi operating system. The user gains the ability to programmatically switch the device off, switch it on and reset it if network instability is detected. Such integration reduces operating costs, as the system can restore connectivity on its own without the need for physical intervention by a service technician at the installation site.



Compact industrial-grade design

The device, measuring **56 x 23 x 95 mm**, fits precisely against the Raspberry Pi mainboard, creating a unified credit-card-sized design. Aluminium **SMA** connectors allow secure connection of external antennas, significantly improving signal gain in areas with poor coverage. The robust physical specification and weight of just **57 g** mean the set fits into standard rail and industrial enclosures.



Advanced digital audio capabilities

Equipping the module with **PCM audio** support opens up new possibilities for embedded systems developers. Low-latency digital audio transfer takes place directly through the 40-pin connector, eliminating the need for additional sound cards. This function speeds up the creation of voice notification systems, smart IP intercoms and advanced communication gateways using the mobile network.



Complete kit for immediate deployment

The package includes all the components needed for correct installation, including a **mounting kit** and a **GPIO** connector extension. The included **USB Type C** accessory ensures immediate communication with the Raspberry Pi unit without the need for soldering. The clear **QSG** instructions shorten configuration time, allowing a quick transition from the prototyping phase to the final launch of the project in the target environment.

