Askey NDQ2300 – 5G USB Dongle – NA SKU

5G USB Dongle

The Askey 5G USB Dongle provides both 5G NR Sub 6 and LTE access capability. It offers the flexibility to combine 5G NR Sub 6GHz and 4G LTE radios to provide up to 2Gbps theoretical data throughput for users to enjoy broadband services and applications. It also supports SRS function to the NR bands to improve the receiving sensitivity.

Brought from the 5G NR new features, it can provide low latency feature to apply to AR/VR, IoT, and Machine Critical variant use cases. In addition, with the USB type C interface, it can connect with many kinds of devices as plug and play without further driver installation.

There is a brand new “USB Power Pass through” function from the power circuit design in the device. Users can choose the power source from the USB host or the external power bank to provide more flexibility to the system integrating with the dongle unit.

Specification

Chipset and System

- Modem Chip: Qualcomm SDX62
- RAM: 4Gb, LPDDR4x
- ROM: 4Gb

Interface

- LEDs: System, 5G, Charging
- USB Type C x2: Data & Power Pass-Through
- Power input: 5V±5%
- SIM Slot: 4FF
- Push Button for USB Power Pass-Through enable/disable

5G NR

- 3GPP Release 16
- Core network options: Option 3X, 3A and Option 2
- Modulation: up to DL 256 QAM, up to UL 256 QAM
- Duplex mode: FDD, TDD
- MIMO: DL 4x4, UL 2x2 (TDD only)
- NRCA up to 2CC (TDD 120MHz/FDD 60MHz)
- 5G NR and LTE EN-DC supported
- SRS antenna switch function (TDD only)
- 5G NR band:
  - DL 4x4 MIMO: n2, n7, n25, n30, n41, n48, n66, n77, n78
  - DL 2x2 MIMO: n5, n12, n14, n26, n29, n71
  - UL 2x2 MIMO: n41, n48, n77, n78

4G LTE

- Category: DL Cat-19, UL Cat-18
- CA:
  - DL: up to 5CC, maximum 16 layers
  - UL: 2CC
- Modulation: up to DL 256 QAM, up to UL 256 QAM
- MIMO: DL 4x4, UL 1x1
- Duplex mode: FDD, TDD
- LTE stand-alone and EN-DC supported
- 4G LTE band:
  - B2 B4 B5 B7 B12 B13 B14 B25 B26 B29 B30 B41 B46 B48 B66 B71

Software

- Local Web GUI Management
- FOTA by Askey server
- IPv4/IPv6/IPv4v6
- SMS: Inbox, Outbox
- SIM/APN Management
- TR069/TR181

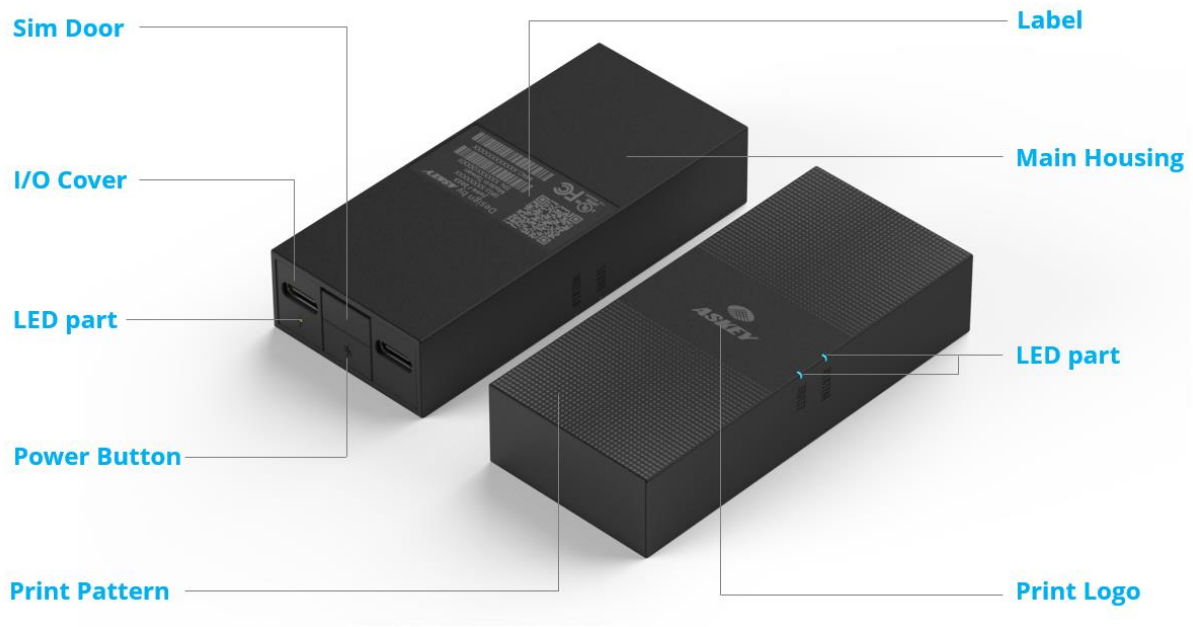
Dimension & Accessory

- 90x40x18.8mm
- USB Type-C to C 0.5m (Data & Charging)
- USB Type-C to A 0.5m (Charging only)

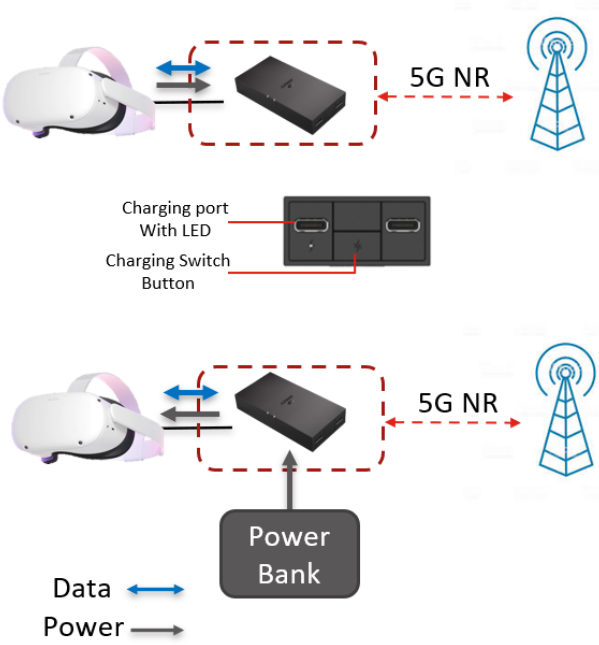
Temperature Range

- Class A: 0°C to +40°C
- Storage Temperature: -40°C to 70°C
- Humidity: 5%~95% (non-condensing)

ID & Size



Power Pass-through



Normal Use case

- The terminal device provides power source to the dongle.
- The device operating time will be reduced for the extra power consumption from the dongle.

USB Power Pass Through (Charging) Mode

- Connecting an external power source to the Dongle “Charging” USB port.
- Push “Charging” button on the dongle to switch to the USB power pass through mode.
- The user can chose a proper power source to drive the dongle and terminal device by the operating time he needs.