



SOFTWARE DEVELOPMENT KIT HARDWARE DEVELOPMENT ENVIRONMENT FOR A1 IOT GATEWAY PLUS AND PLUS 4G

The software development kit A1GW.PLUS.4G.SDK contains all hardware components to put the gateway A1GW.PLUS.00 and A1GW.PLUS.4G into operation for effective software development.

In addition to the power supply and all antennas required for radio operation, a USB-A interface is available for the host computer (development computer with the YOCTO toolchain).

Via this USB-A connection, the connection to the Linux console of the gateway is established on the host computer with any terminal program. After entering the user name and password, the pre-installed embedded Linux operating system can be used. A Python script with useful functions for IoT tasks facilitates commissioning.

READY TO USE

- Ready for immediate use
- Linux console available from USB interface
- 230V power supply cable with Euro plug

RADIO OPERATION

- WLAN / Bluetooth antenna
- 4G cellular antenna
- GNSS antenna (GPS, Galileo)

ROBUST HOUSING

- 12 TE small distribution board
- Can also be used outdoors
- 5 TE free installation space for further hardware components

Part number	A1GW.PLUS.4G.SDK
Housing	Small installation distributors with 12 sub-units 35mm DIN-A Support rail with comfort cable opening with brush lock (protection class IP54 on request) Dimensions: height 302 mm, width 310 mm, depth 151 mm
Power supply	230V ~ / 24V = power supply unit with 2m Euro plug cable
Protection	Protection against short circuits with standard 16, miniature circuit breaker
Access to the Linux console	Modified A1GW.BASIC gateway with connected RS232 / USB converter with USB-A connector and 1m cable
4G cellular antenna	2 pieces SMA blade antennas A1AT.KD.4G.5G.01 in kink design, suitable for 4G and 5G cellular networks (617-960 / 1427-2700 / 3300-5850MHz) as well as for position determination using GNSS (GPS, Galileo)
SIM card	No SIM card is included in the scope of delivery. Required design: Micro-SIM. A data-capable SIM card must be used. The setup is done via the Linux console, a tutorial is available.
WiFi antenna	SMA PIN antenna A1AT.PI.WIFI.BT.01, suitable for WiFi and Bluetooth operation (2.400-2.485 GHz / 5.515-5.587 GHz)
Operating system	Embedded Linux distribution a1-embedded-linux-plattform (https://github.com/Automation-One)
Python SDK „A1-Suite“	Python3 application with useful examples for IoT applications such as pymodbus and paho-mqtt

