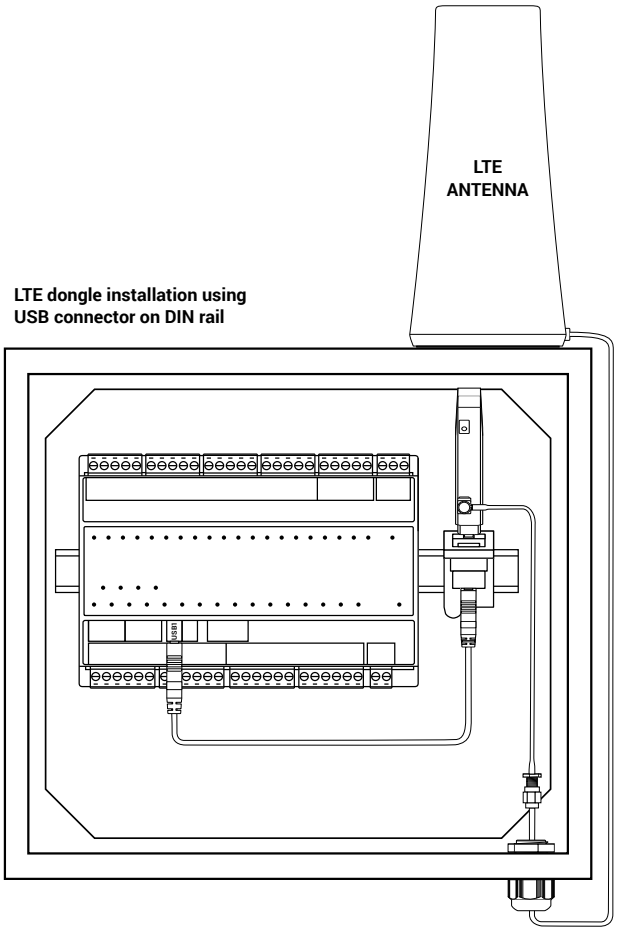
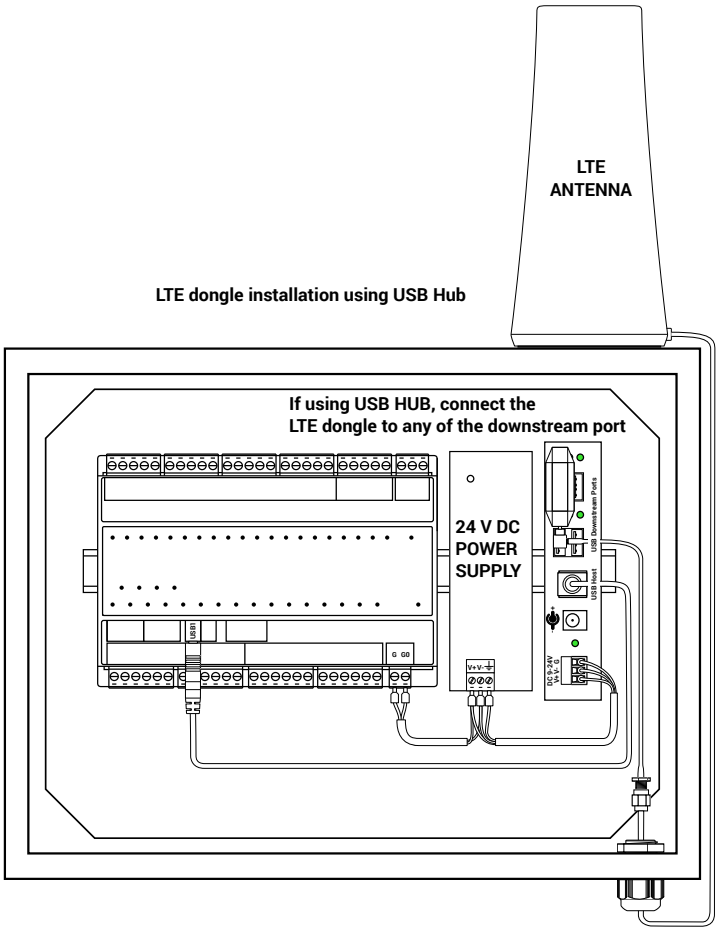
LTE-DIN-EXT-SET

SPECIFICATION	
Power supply	Operating voltage: USB powered, 4.2 V–6.0 V Power consumption: 35 mA (idle, typical), 600 mA (during communication, typical)
Modem	Onyx 4573326591584 LTE USB modem
External antenna	LTE antenna GA.130.201111 with a magnetic mount, 700 to 4000 MHz
Performance	LTE Cat. 4 (3GPP Release 11)
Network bands	4G LTE-FDD B1/B2/B3/B4/B5/B7/B8/B12/B13/B18/B19/B20/B25/B26/B28 LTE-TDD B38/B39/B40/B41
Packet data	Max. 150 Mbps downlink, max. 50 Mbps uplink
Compatibility	3GPP TS 27.007, TS 27.005, enhanced AT commands
Protocols	TCP, UDP, PPP, FTP, HTTP, MQTT, NTP, NITZ, PING, QMI
OS	Linux 2.6 ~ 5.4
Interfaces	USB 2.0 type A, nano SIM (4FF), built-in antenna 2 x CRC9
Temperature	Operating:-20°C to 60°C (-4°F to 140°F) Storage: -35°C to 85°C (-31°F to 185°F)
Relative humidity	Operating: 5 to 75% RH (without condensation) Storage: up to 80% RH (without condensation)
Antenna connector	CRC9-SMA-150
Dimensions	95/36/13 mm (3.74/1.42/0.51 in)
Mounting	DIN rail mounting (DIN EN 50022 norm)
Housing material	PC/ABS

INSTALLATION ON DIN RAIL



INSTALLATION WITH USB HUB



iSMA CONTROLLI S.p.A. - Via Carlo Levi 52, 16010 Sant'Olcese (GE) - Italy | support@ismacontrolli.com

INSTALLATION GUIDELINES


Please read the instruction before use or operating the device. In case of any questions after reading this document, please contact the iSMA CONTROLLI Support Team (support@ismacontrolli.com).


• Before wiring or removing/mounting the product, make sure to turn the power off. Failure to do so might cause an electric shock.
• Improper wiring of the product can damage it and lead to other hazards. Make sure that the product has been correctly wired before turning the power on.
• Do not touch electrically charged parts such as power terminals. Doing so might cause an electric shock.

• Do not disassemble the product. Doing so might cause an electric shock or faulty operation.


• Use the product only within the operating ranges recommended in the specification (temperature, humidity, voltage, shock, mounting direction, atmosphere, etc.). Failure to do so might cause a fire or faulty operation.
• Firmly tighten the wires to the terminal. Failure to do so might cause a fire.

• Avoid installing the product in close proximity to high-power electrical devices and cables, inductive loads, and switching devices. Proximity of such objects may cause an uncontrolled interference, resulting in an instable operation of the product.
• Proper arrangement of the power and signal cabling affects the operation of the entire control system. Avoid laying the power and signal wiring in parallel cable trays. It can cause interferences in monitored and control signals.
• It is recommended to power controllers/modules with AC/DC power suppliers. They provide better and more stable insulation for devices compared to AC/AC transformer systems, which transmit disturbances and transient phenomena like surges and bursts to devices. They also isolate products from inductive phenomena from other transformers and loads.
• Power supply systems for the product should be protected by external devices limiting overvoltage and effects of lightning discharges.
• Avoid powering the product and its controlled/monitored devices, especially high power and inductive loads, from a single power source. Powering devices from a single power source causes a risk of introducing disturbances from the loads to the control devices.
• If an AC/AC transformer is used to supply control devices, it is strongly recommended to use a maximum 100 VA Class 2 transformer to avoid unwanted inductive effects, which are dangerous for devices.
• Long monitoring and control lines may cause loops in connection with the shared power supply, causing disturbances in the operation of devices, including external communication. It is recommended to use galvanic separators.
• To protect signal and communication lines against external electromagnetic interferences, use properly grounded shielded cables and ferrite beads.
• Switching the digital output relays of large (exceeding specification) inductive loads can cause interference pulses to the electronics installed inside the product. Therefore, it is recommended to use external relays/contactors, etc. to switch such loads. The use of controllers with triac outputs also limits similar overvoltage phenomena.
• Many cases of disturbances and overvoltage in control systems are generated by switched, inductive loads supplied by alternating mains voltage (AC 120/230 V). If they do not have appropriate built-in noise reduction circuits, it is recommended to use external circuits such as snubbers, varistors, or protection diodes to limit these effects.

Electrical installation of this product must be done in accordance with national wiring codes and conform to local regulations.

iSMA CONTROLLI S.p.A. - Via Carlo Levi 52, 16010 Sant'Olcese (GE) - Italy | support@ismacontrolli.com