



adportas i2M Mini v.2



System interconnection and telemetry gateway



1. Description.

Adportas i2M Mini is a data gateway that connects industrial equipment that has serial data communication ports (RS232 and / or RS485) to the Internet through the 3G mobile network. Its main uses are remote monitoring of processes and / or sensors, telemetry and geolocation (through built-in GPS).

This complex integrated 3G communications system has been fully programmed, electronically designed and assembled by Adportas software and hardware departments, aiming to provide the most cost-effective solution possible for our end customers.

Adportas i2M Mini is a transparent bridge between the end user and the connected device, as it does not involve an external server to establish communication, allowing it to be accessed directly from a private mobile network.

Adportas i2M Mini port allows remote configuration of the connection's data (APN, Serial, GPS) as well as obtaining the location of the device when it is needed.

Adportas i2M Mini can be remotely reseted via text message (SMS) if necessary.

2. Specifications.

- Input voltage: 12VDC to 1A.
- Serial communication: RS232 or RS485 (from 2400 to 115200 Baud).
- Wireless communication: 3G (Dual-Band UMTS / HSPA + 850 / 1900MHz).
Quad-Band GSM / GPRS / EDGE 850/900/1800 / 1900MHz.
- Selector that allows you to choose whether the serial port will work as RS232 or RS485.
- SMA coaxial connector for external 3G antenna.
- Number of SimCards supported: 1
- SimCard Format: Mini SIM (2FF).
- Configuration: via micro USB type B (USB 2.0).

- LED Indicators:
 - Power: Indicates that the machine is on.
 - Status: Indicates whether or not you are connected to the 3G network.
 - Serial: Indicates whether there is activity on the serial communication bus (RS232 and / or RS485).

- Operating temperature: -15°C to 85°C.

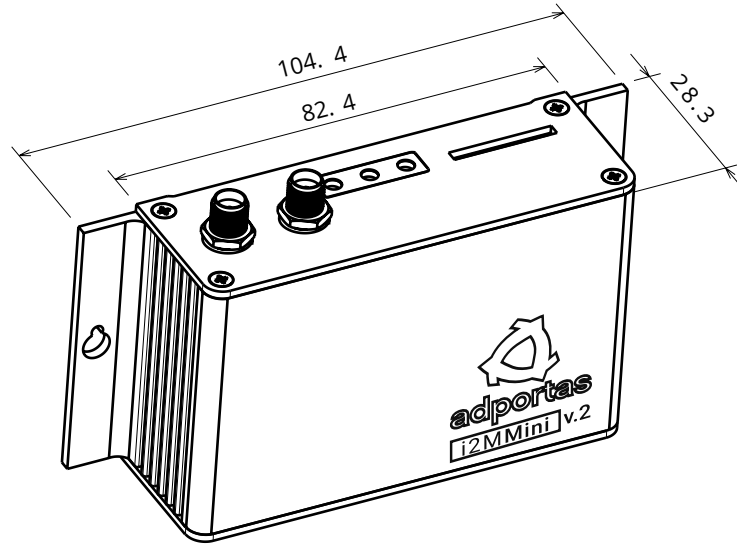
- PCB material: FR-4.

- Type of installation:
 - With screws.
 - Optional: Din Clip for installation of rails.

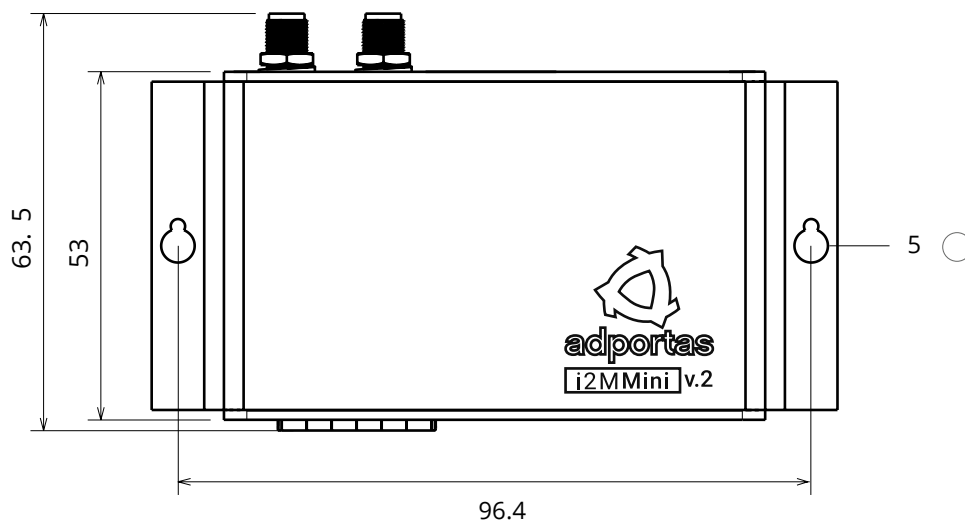
3. Physical Characteristics.

Housing: Black anodized aluminum.
Product Dimensions in millimeters:

Isometric view



Front view



4. Adportas i2M Mini parts & specifications.

INTERFACE TYPE



INTERFACE ANTENNA
Coaxial SMA connector for external 3G antenna.

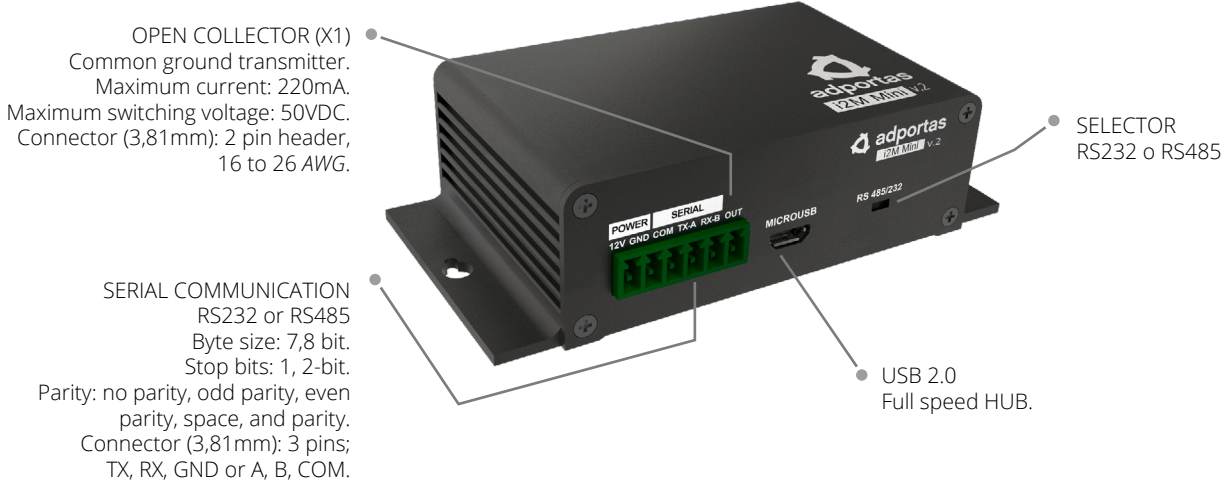
Data transfer specifications:

- HSPA+: Max. 14.4 Mbps (DL), Max. 5.76 Mbps (UL).
 - WCDMA: Max. 384 Kbps (DL), Max. 384 Kbps (UL).
 - EDGE Class: Max. 236.8 Kbps (DL), Max. 236.8 Kbps (UL).
 - GPRS: Max. 85.6 Kbps (DL), Max. 85.6 Kbps (UL).
- Certifications: FCC / ROHS / REACH.

- GPS:
 - Location of the CELL wizard
 - A-GPS: MS-Based, MS-Assisted
 - Independent GPS
 - QUALCOMM XTRA GPS mode
 - GLONASS

ANTENNA
50-ohm female SMA standard interface

PERIMETER TYPE



OPEN COLLECTOR (X1)
Common ground transmitter.
Maximum current: 220mA.
Maximum switching voltage: 50VDC.
Connector (3,81mm): 2 pin header,
16 to 26 AWG.

SERIAL COMMUNICATION
RS232 or RS485
Byte size: 7,8 bit.
Stop bits: 1, 2-bit.
Parity: no parity, odd parity, even
parity, space, and parity.
Connector (3,81mm): 3 pins;
TX, RX, GND or A, B, COM.

USB 2.0
Full speed HUB.

SELECTOR
RS232 o RS485