

IOT BOXES

WIRELESS AND LOCAL DATA COLLECTION FOR FIELD USE

The UGT IoT boxes are designed for reliable field use and for connecting analog, SDI-12, and Modbus sensors, as well as digital meters. Depending on the model, the measurement data collected is transmitted wirelessly and/or optionally stored locally on an SD card. The boxes are available in battery-powered and rechargeable battery-powered versions and allow for the connection of up to 6 or 9 sensors, respectively.

VARIANTS

1. **IoT Box:** Battery-powered, NB-IoT or LoRaWAN transmission, connects up to 6 sensors
2. **IoT Data Box:** Like the IoT Box, with additional local data storage on an SD card
3. ***Data Box:** Battery-powered, no wireless transmission, data stored exclusively locally on an SD card
4. **IoT Power Box:** Battery-powered, NB-IoT or LoRaWAN transmission, supports up to 9 sensors
5. **IoT Data Power-Box:** Like the IoT Power Box, with additional local data storage on an SD card
6. ***Data Power Box:** Battery-powered, local storage on SD card only, no wireless transmission

MAIN FEATURES

- Wireless transmission of measurement data via the mobile network; data access via a personal SVADSS portal
- LoRaWAN: Alternative wireless data transmission; data access via SVADSS or a customer-specific server
- Energy-efficient: Designed for long-term autonomous operation in the field.
- Accessories: Weatherproof enclosures with ground spike, tree mounting kits.

*The data variants store measurement data exclusively on the SD card. The encrypted data can be downloaded and then manually uploaded to the SVADSS portal, where it is automatically decrypted. **Note:** The data variants do not perform automatic time synchronization. As a result, the internal time may deviate from the actual time over the course of time. For effective use, it is therefore necessary to manually synchronize the time on a regular basis.



IoT Box / IoT Data Box / Data Box



TECHNICAL DATA: IOT BOX / IOT DATA BOX / DATA BOX

PARAMETERS	SPECIFICATIONS
Dimensions	Height 122 mm, case width 85 mm, lid Ø92 mm
Number of Sensors	1 to 6
Housing Material / Protection Rating	Polycarbonate (fire-resistant & UV-stabilized) / IP 68
O-rings	Ø81 & Ø77 mm
Area of Application	-10 ... +50 °C, above-ground and underground installation
DATA TRANSMISSION AND STORAGE	
Supported LPWAN Standard	NB-IoT (LoRaWAN available upon request)
Transmission Interval	Default 1-hour interval; shorter intervals available upon request > reduce battery life
Antenna	Helical, gain 2.5 dBi
Storage	Locally on an SD card only with the IoT Data Box or Data Box
ELECTRICAL SPECIFICATIONS	
Power supply	3.6 V Lithium Battery LS33600/17,000 mAh
Power consumption	<3.5 µA in sleep mode / 250 mA during transmission
Battery life	At least 5 years at 6 measurements per day or 100 µA per data transmission

TECHNICAL DATA: IOT POWER BOX / IOT DATA POWER-BOX / DATA POWER BOX

PARAMETERS	SPECIFICATIONS
Dimensions W x D x H	150 x 90 x 205 mm
Number of Sensors	1 to 9
Weight	approx. 1.85 kg
Enclosure Protection Rating	IP 67
Area of Application	-10 ... +50 °C, above-ground installation
DATA TRANSMISSION AND STORAGE	
Supported LPWAN Standard	NB-IoT (LoRaWAN available upon request)
Transmission Interval	Default 1-hour interval; shorter intervals available upon request > reduce battery life
Antenna	Helical, gain 2.5 dBi
Storage	Locally on an SD card only with the IoT Data Power Box or Data Power Box
ELECTRICAL SPECIFICATIONS	
Power supply	12.8 V / 12 Ah LiFePO ₄ lithium iron phosphate battery
Operating voltage	10 ... 14.6 V
Charging threshold	<12 V (if the voltage drops below this level, the battery must be recharged immediately)
Operating Temperature During Discharging/Charging	-20 ... +60 °C / 0 ... +50 °C