# **AGREUS**<sup>®</sup>

# AGB-2000 base station

- wireless communication with sensors and actuators of the AGREUS<sup>®</sup> system
- wireless transmission of information to the AGREUS® internet Portal
- information from the base station and remote control available on-line, from anywhere on desktop computers and mobile devices (smartphone, tablet, laptop)
- constant control of crop parameters and optimization of irrigation and fertigation processes
- for use in agriculture, horticulture, forestry and green spaces

The AGB-2000 base station is a device that is the central point of the AGREUS® System. The purpose of the base station in the system is to intermediate communications between the measurement and executive modules (elements of the AGREUS® system) and the AGREUS® Portal located in the cloud. In order to optimize the range, the AGREUS® System allows for installations using many base stations associated with the same user account, which enables coverage of large-area farms or farms with a dispersed structure of agricultural land.

## **KEY FEATURES**

- Range up to several kilometers (depending on the height of the base station as well as topography and land cover),
- Support for even the most distant measurement and executive modules, thanks to the possibility of connecting an external antenna (option),
- High frequency of data transfer from the module network every 1 minute,
- Transmission security data transferred between system components are fully encrypted using the AES-128 protocol,
- Easy integration of the device with the AGREUS® system thanks to the TapIN (NFC) technology you bring the smartphone closer and the system automatically recognizes the base station (Note! The smartphone must be enabled to read NFC and have the Agreus application running),
- Immunity to environmental conditions IP 44, which means reliable operation regardless of weather conditions,
- Many mounting methods: on a dedicated tripod, on masts or on walls,
- Remote software update,
- The AGREUS® portal can send SMS and email notifications about alarm events detected by the base station, such as loss of communication with the module.



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# **AGREUS**°

# AGB-2000 base station

# Technical data

#### General

- Dimensions: 116 x 146 mm
- Weight: 395 g
- Mounting method:
  - » frame on a tripod with the possibility of anchoring to the ground – total height is 1.3 m or 2.3 m
  - » To a tubular mast the clamp allows the holder to be mounted on masts of various diameters, the height of the base is 0.3 m
  - » To a wall or other part the clamp allows you to mount the holder to a flat surface, height of the base is 0.3 m
- Working temperature: -20 to + 50 °C
- Relative humidity: 95 %, non-condensing
- Protection class: IP 44

## 2G/3G modem

- Modem type: Cinterion EHS6
- 2G: 850, 900, 1800, 1900 MHz
- 3G: 800, 850, 900, 1900, 2100 MHz
- Dual SIM: passive (SIM + MIM)
- SIM card: nanoSIM or optional MIM
- Antenna: built-in

## Radio modem

- Radio technology: Semtech LoRa<sup>®</sup>
- Working channel frequency: 869.5 MHz
- Working channel band: 125 kHz
- Maximum transmit power: 25 mW
- Receiver sensitivity: -133.5 dBm
- Antenna: built-in or external with the SMA-F connector
- External antenna impedance: 50  $\Omega$

## **Communication interfaces**

- WiFi: 802.11 b/g/n WLAN (internal antenna)
- Bluetooth: v4.2 BR/DR/LE (internal antenna)
- Ethernet: 10Base-T/100Base-TX with POE (option)

## Power supply

- DC voltage: 9-42 V DC
- AC voltage: 9-24 V AC
- Input current (for 24 V DC): 55 mA



