

Universal desktop sounding system in robust metal housing



### Main benefits

- Completely maintenance-free (without air filter)
- Ideal for office applications
- Software defined radio (SDR) and antenna diversity for optimal range
- Internal GNSS receiver and re-radiator streamlines launch preparation
- Industry standard USB interface connects to the sounding workstation

### Key specifications

<b>Compatibility</b>	All Graw radiosondes
<b>Sounding workstations</b>	One or multiple Windows PCs connected via IP network running grawMet software
<b>Radio receiver</b>	400-406 MHz, Software Defined Radio, Dual Antenna Switching
<b>Connectivity</b>	DC/AC power sources, GNSS repeater and re-radiator

### Product description

GS-E is a general-purpose sounding system designed for office-like environments and is used by hundreds of synoptic launch sites worldwide. Robust Software defined radio (SDR) technology and automatic antenna switching ensure no data gets lost. RF cables from the antennas attach to the sounding system, which itself connects to an attached sounding workstation (PC) running our grawMet software. The maintenance-free design with no moving parts ensures smooth operations. The integrated GNSS receivers and re-radiators streamline launch preparations.

## Features

### Advanced Radio Receiver

The state-of-the-art SDR receiver provides excellent reception performance combined with a high immunity to in-band and out-of-band interference. This is shown in the class-leading performance values for rejection, dynamic range and third-order intercept point. Antenna diversity is ensured by automatic antenna switching, between an omnidirectional antenna for high drift scenarios and a circular antenna for overpasses. Both antennas are equipped with amplifiers, which are remotely powered through the ground station connection.

### Intuitive grawMet Software

The easy-to-use grawMet software sets a new standard in sounding processing. All relevant information can be visualised using various views including tables, graphs and maps. During the sounding, both freely configurable and WMO standard messages are generated according to the user's wishes. Routine station set-up and system operation are easily performed with the help of grawMet software, which can run on any standard PC using Microsoft Windows and functioning as a sounding workstation.

### Designed to streamline operations

Thanks to the integrated GNSS receiver and re-radiator, the radiosonde can obtain the GNSS navigation fix during the ground check, streamlining launch operations. The alternative DC power supply, the overall low weight and compact design facilitate usage on vehicles, vessels, or even aircraft. An industry standard USB-interface is used to connect to both the sounding workstation and the ground check dongle.

## Technical Data

<b>General</b>	
<b>Supported operating systems</b>	Windows® 10 professional or newer (older versions on request)
<b>Service availability</b>	> 99%
<b>Receiving Range</b>	> 250 km, no altitude restrictions
<b>Standards</b>	CE (Europe), CSA (Canada), NFPA / NEC (USA)
<b>Interfaces</b>	
<b>Connection to PC</b>	USB
<b>Connection to radiosonde</b>	USB
<b>Antennas</b>	2 x 400 MHz, GPS IN, GPS OUT
<b>Power</b>	1 x AC, 1 x DC
<b>Electrical connection</b>	
<b>Power supply</b>	AC voltage: 110 V/AC to 250 V/AC, 50 – 60 Hz DC voltage: 10 V/DC to 32 V/DC
<b>Power consumption</b>	< 20 Watt (incl. antenna amplifiers)
<b>Receiver</b>	
<b>Frequency range</b>	400 – 406 MHz
<b>Tuning steps</b>	20 kHz
<b>Data transmission to PC</b>	
<b>Sampling rate</b>	1 Hz
<b>Status information</b>	Frequency, signal strength, GNSS status
<b>Meteorological data</b>	Raw data (PTU, Wind)
<b>Mechanical properties</b>	
<b>Weight</b>	3,3 kg
<b>Size</b>	320 mm x 190 mm x 90 mm

## Impressum/Disclaimer

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