



Rain Gauge Measurement Systems

Rain Gauges and Data Logger

Key Features

- High precision rain gauge with impulse output (0.1mm or 0.2mm)
- Longterm Stability
- Digital data recording of precipitation impulses via rain data logger RDS-2
- Optional: bird protection ring and/or heating system with temperature control
- Telemetric data transmission via GSM/GPRS or satellite (e.g. Iridium)



Data Logger RDS-2



Rain Gauge RG 50



Telemetric
Rain Gauge RG100
with IRIDIUM-Satellite
Transmission



RG-50 Production



Installation of Telemetric Rain Gauge Station in Qatar



Telemetric Rain Gauge Station



Groundwater
Station with
RG50



RG 50

Rain Gauge Type RG 50



Tipping Bucket System

High precision rain gauge system with impulse output. Suitable for connection to automatic data loggers (e.g. RDS-2) and telemetric transmission systems (GSM/GPRS, satellite). Tipping bucket with single sided ball bearings, level and adjusting screw. For the installation in areas with a risk of frost, the rain gauge can optionally be equipped with a funnel heating system.



Technical Details:

Housing:	Aluminium, coated
Orifice, collecting area:	200cm ² , 400cm ² (optional)
Resolution:	1 impulse = 0.1mm precipitation or 1 impulse = 0.2mm precipitation
Funnel Heating System:	15W, 24V, switching point +4°C, switching hysteresis +3°C
Switching capacity:	3W
Direct current voltage:	150V
Circuit DC:	0.25A
Output:	Reed contact impulse (potential free contact)
Tipping bucket:	Plastic material (heavy duty)
Dimensions:	Height 346mm, Diameter 205mm

RG 100

Rain Gauge System



The SEBA rain gauge system **RG 100** offers a compact design which combines the protection housing and funnel system into one unit.

The special aluminum lockable protection housing can contain the tipping bucket, data logger (RDS-2, MDS-5 COM), modem (GSM/GPRS, satellite), power supply and if desired a collecting bottle.

Technical Details

RG 100

Collecting Area:	200 cm ² , 400 cm ² or 500 cm ²
Recording Time:	depends on selected data logger type (RDS-2, MDS-5 COM)
Output:	Impulse, potential free
Resolution:	1 impulse = 0.1mm precipitation or 1 impulse = 0.2mm precipitation
Collecting bottle:	5 liters, plastic material
Funnel:	(DIN 58667) plastic, 200cm ² = 10mm precipitation
Dimensions:	(height, width, depth) 620 x 225 x 285 mm



Data Recording

Data Logger Type RDS-2

The **RDS-2** data logger is characterized by its simple and user-friendly handling, high operation reliability, robust and compact design including a water-tight plastic foil keyboard. This logger serves for digital recording of precipitation tipping bucket impulses associated with date and time.

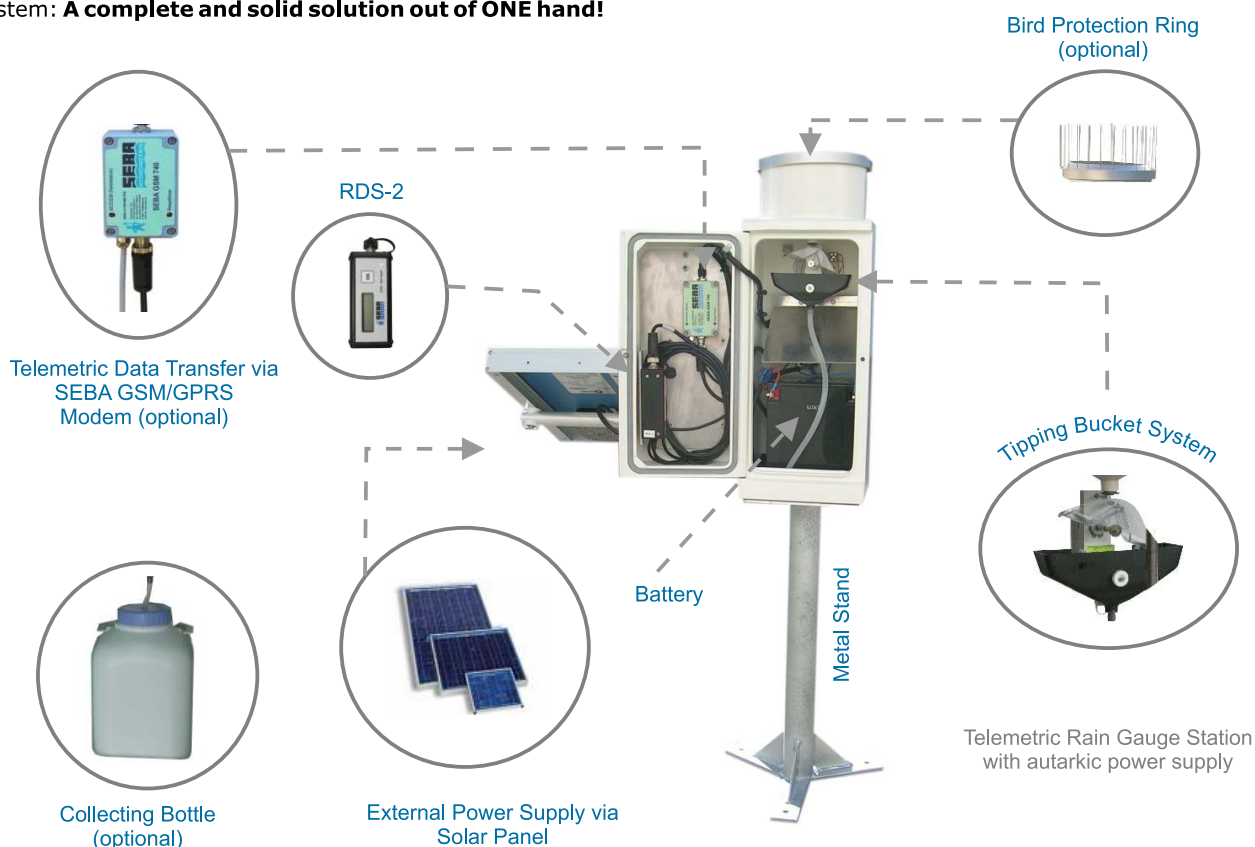
Technical Details:

Interface:	RS 232 COM Port
Memory:	1 MB ca. 490,000 values with 0.1mm tipping bucket = 49,000mm precipitation
Real Time Clock:	deviation +/- 15 ppm
Power Supply:	internal lithium battery sufficient for > 8 years
Keyboard:	alpha-numerical LCD-display
Housing:	aluminium with plastic-foil IP 65
Dimensions:	W x H x L 61 x 125 x 36mm
Weight:	appr. 250g
Operation Temp.:	-20 °C ... +70 °C



Complete Rain Gauge Station

SEBA Rain Gauge Station in combination with a data logger and automatic telemetric system: **A complete and solid solution out of ONE hand!**



A detailed description of our telemetric data transfer solutions are described in detail in a separate SEBA brochure.

Additional Options

Accessories:

- **Heating system for RG100:** for heating the internal rain gauge, 2-point control system and thermistor switch, 60 Watt heating power, 24V power supply
- **Funnel heating system for RG50 and RG100:** for de-icing, 15 Watt heating power
- **Ring heating system**
- **Mains adapter:** IP 40, 220V/24VAC/200VA for power supply of heating system
- **Mains adaptor:** IP 64, 220V/24VDC/60VA power supply suitable for field installations
- **Bird Protection Ring:** prevents any interference of birds sitting or nesting at or inside the rain gauge
- **Tipping Bucket System** for additional or belated installation for data logger or telemetric data transfer. Technical details as in RG 100.

For all types of tipping bucket systems:

- **Impulse/Power-Transducer**
Output 0/4-20mA = 0-10mm precipitation, configurable to 50 - 1,600 impulses, power supply 220V or 24V.



For RG 50 / RG 100

- **2" Metal Stand** with flange

Total height incl. rain gauge: 1,200mm (1.2m) for a secured installation of the rain gauge

Model Series HRG 200

Rain Gauge Type HRG 200

With an integrated syphon device (Hellmann system) and registration via drum or strip chart recorder. Depending on the amount of precipitation, the registration pen is being moved upwards by a float. An automatic drain of the inbuilt cylinder into a collecting bottle is being conducted at a precipitation height of 10mm. A metering in liters with the measuring vessel (DIN 58667) as a control device can be conducted at any time. After a complete draining of the cylinder, the pen is automatically zeroed on the chart. The housing as well as funnel system are composed of stove enamelled aluminium. The rain gauge is extremely robust and secure with strong locks, hinges and stand supports.

HRG 200/B

Strip Chart Recorder

HRG 200/T

Drum Recorder

Technical Details

HRG/B

Collecting Area:	200cm ²
Recording Time:	31 days
Clockwork:	Hand driven
Max. record. chart width:	80mm = 10mm precipitation
Resolution:	0.1mm
Collecting Bottle:	8 liters, plastic material
Measuring vessel (DIN 58667)	200cm ³ = 10mm precipitation
Dimensions: (height, housing Ø, roof Ø)	1000mm x 385mm x 490mm
Weight:	appr. 18kg



HRG/T

200cm ²
1 resp. 7 day(s) <i>(please specify when ordering)</i>
Hand driven
80mm = 10mm precipitation
0.1mm
5 liters, plastic material
200cm ³ = 10mm precipitation
1000mm x 238mm x 372mm
appr. 13kg



The right is reserved to change or amend the foregoing technical specification without prior notice.



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