Installation

The Compact-Station can be installed in a wide range of locations. The pre-formed stand with base plate can be mounted on a concrete base, a natural hard surface (such as bedrock) or a bridge. The special design shape of the stand and base plate also allows for it to be attached to either a groundwater or surface water stilling well of up to 120 mm. If the base plate is removed, the station can be attached to walls. Thanks to the sub-frame, which is preassembled in the factory, the Compact-Station takes only a few hours to be assembled. The first measured and logged data will be available the very same day.

Secure stand to concrete foundation …

… insert pole with solar panel and GSM antennae into the stand …

… attach sub-frame, connect sensors and close protective housing.

Technical data

Mechanical specifications
- Stand: U profile with base plate, 100 DIN1026-StZn; 1.7 m
- Aluminium pole; anodised; pipe diameter 70 mm x 5 mm; bracket on end of pole for antenna and solar panel
- Protective housing; GFK plastic; 275 x 300 x 540 mm; 1.4301 stainless steel sub-frame; safe from flooding
- Total height: 4.2 m

Power supply
- 12 V / 30 W solar panel; 460 x 530 mm (x 2 if required)
- Solar charge regulator and exhaustive discharge protection (Power Control Unit PCU 12)
- Maintenance-free back-up battery, 12 V / 24 Ah

OTT – Your partner for:
- Water level measurement in ground and surface water
- Discharge measurement
- Precipitation
- Water quality measurement
- Data management and communications
- HydroService: consulting, training, installation and maintenance

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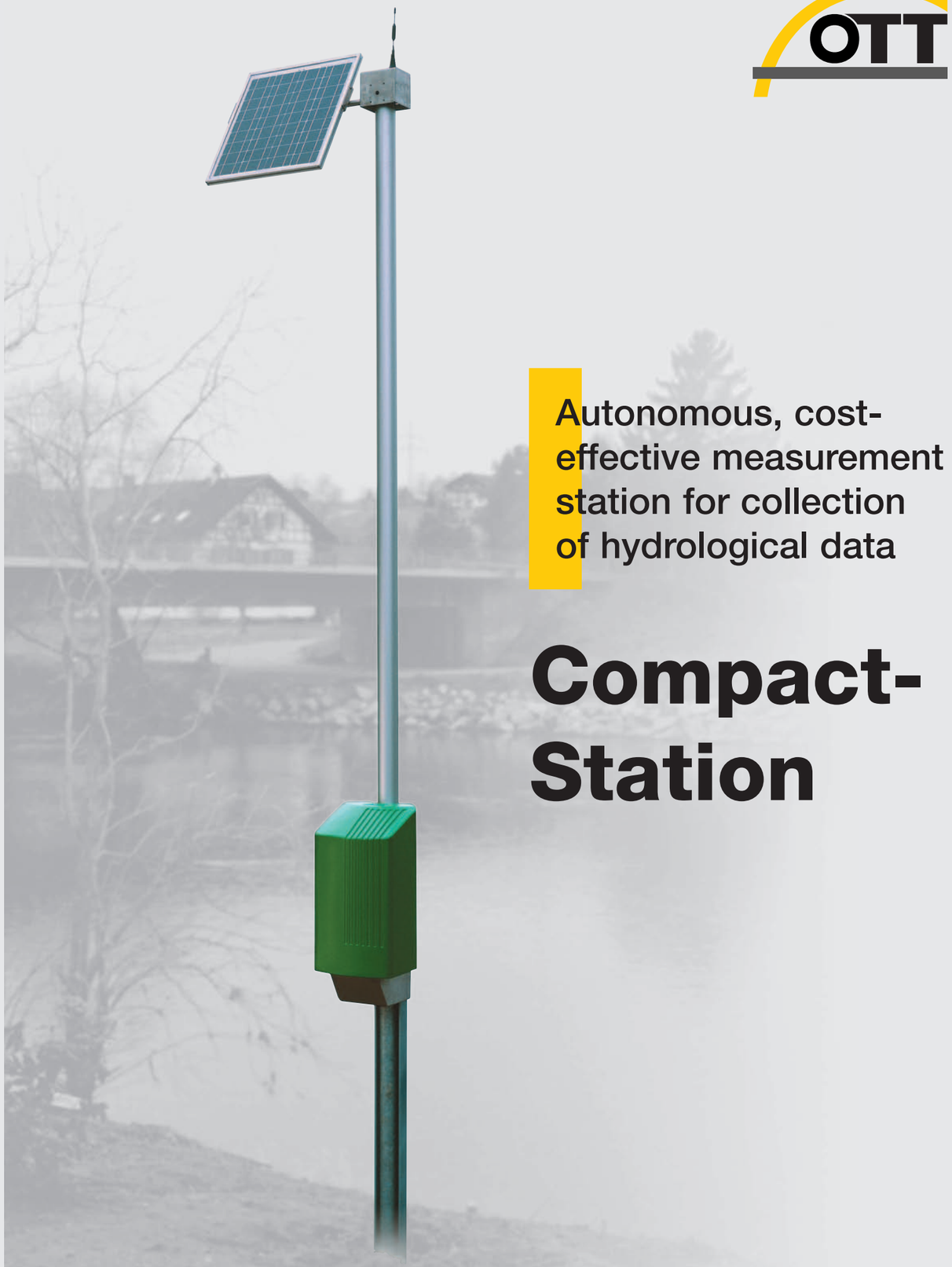
We reserve the right to make technical changes! 55.560.000.P.E As at: 03/2003



Autonomous, cost-effective measurement station for collection of hydrological data

Compact-Station

CompactStation

Increasingly, the ability to forecast environmental data precisely and accurately to specific criteria is becoming more important. To do this a measurement network is required which can gather up-to-date environmental data reliably and in a cost effective manner. At OTT we have come up with an interesting solution to meet these requirements: the new CompactStation. This fully equipped measurement station can operate as a stand-alone unit thanks to its solar power supply and GSM communications option. It does not require any external utility supplies and can be mounted quickly and cheaply in a single day and as a rule permission to erect the sites are not required.

Design

The CompactStation is supplied with all components required to operate a measurement station: sensor, data-logger, communication equipment as well as a power supply. These components are mounted on a sub-frame at the factory to the customers specification. The sub-frame can then be inserted into the station during installation.
The housing is constructed using the diving bell principle, this means that an air pocket prevents the unit from flooding even if it is inundated by flood water and prevents the instruments from being harmed.
The design and construction material of the unit also deter unauthorised access to the instruments as well as protection against the elements. In its standard design, the CompactStation has an integral stand with a base plate to secure it to a concrete foundation. Alternatively, it can be mounted to a bridge or convenient wall with other fixing options. The extension pole can have one, or if required, two solar panels as well as the communication antennae. The pole can also be used to mount meteorological sensors giving the unit even more flexibility. The customer can specify, GSM, radio or satellite options to communicate the data collected. The design of the CompactStation gives the customer a fully autonomous monitoring station that can be erected quickly and cost-effectively giving them an effective alternative to conventional monitoring stations.

CompactStation basic package

- Sub-frame with protective housing
- 12 V / 30 watt solar panel
- Solar charge regulator and exhaustive discharge protection
- 12 V / 24 Ah battery pack
- Stand (U profile; 1.7 m)
- Aluminium pole (dia. 70 mm; 3 m)
- Assembly set

Equipment options

Data-logger
- HYDROSENS (MIDI housing)
- LogoSens®

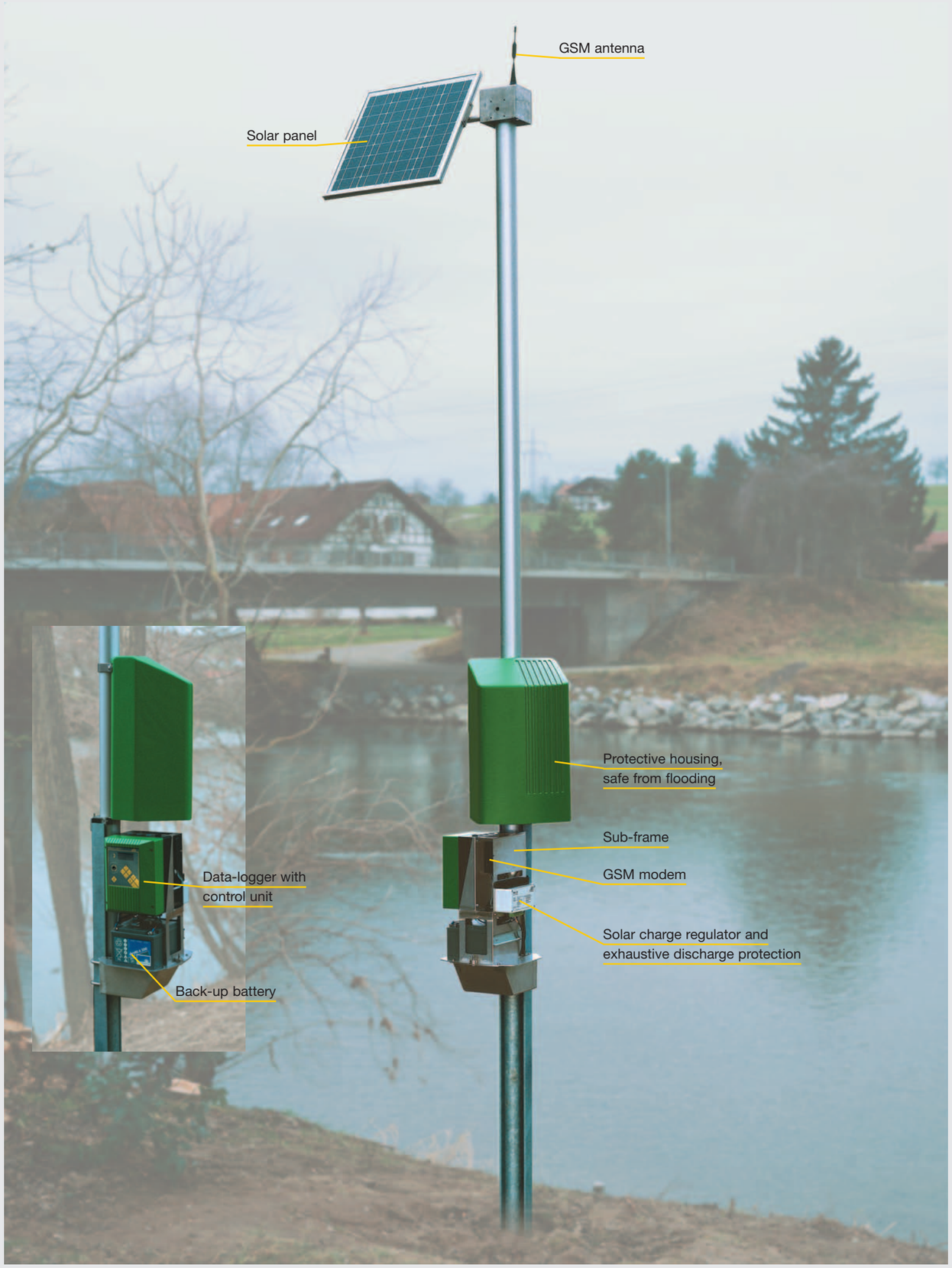
Water level
- Kalesto radar sensor
- NIMBUS bubble principle sensor
- Thalimedes shaft encoder

Water quality
Conductivity, pH value, temperature, ORP, dissolved oxygen, turbidity:
- MINISONDE 4a / DATASONDE 4a
- Quanta / Quanta-G

Communications
- GSM modem
- Radio
- Satellite

Discharge measurement
- Utrasonic system Sonicflow
- Kalesto radar sensor

Meteorology
- Wind speed and direction
- Air temperature, humidity and pressure
- Global solar radiation



OTT HydroService

OTT's comprehensive HydroService can, if required, look after the stations from design to data evaluation. In this way, we truly offer a one-stop-shop as we coordinate and carry out the planning and construction required to mount the station. This involves installing and connecting sensors, mounting the station and commissioning it and providing documentation.

Maintenance

OTT offers a maintenance package specially designed to meet your needs. For example, we will check the performance of all important components at specified intervals.
Also, at strategically important sites a level of redundancy can be built into the station ensuring the highest possible security for essential data collection and retrieval.

Data management

As a further service, we offer you a complete data management system. This allows the data to be read out, verified and automatically forwarded to the customer. To achieve this we use our own bespoke application software HYDRAS 3 with the capability to: archive, edit, display and report on all data collected from the stations.