



Storing and transmitting data  
OTT netDL 500/1000  
IP Data Logger

## OTT netDL 500/1000

IP compatible data logger family with a future

The IP compatible OTT netDL 500 and 1000 data loggers were developed especially for use at hydrology and meteorology stations. As well as their standard task of collecting data, the flexible data loggers are masters of all current methods of remote data transfer and are also equipped to communicate via the Internet. As a result, the new loggers not only meet today's requirements, but are also perfectly equipped to meet the demands of tomorrow.

A powerful GSM/GPRS modem is pre-installed for transmitting data to the headquarters (optional). Ethernet and USB ports and an integrated web server create additional communication possibilities. Those who need a high level of data availability can use different communication routes concurrently. The modular design offers flexible possibilities for this purpose adapted to the station, as the loggers are supplied individually equipped. Furthermore, the data loggers are capable of multitasking and communicate with all connected sensors in parallel. A high storage capacity and efficient power management go without saying in this connection. At the same time, these all-rounders are easy to operate and can even be controlled remotely using standard browsers.

# Data Communication and Data Management

# OTT netDL – flexible data loggers for all situations

## Advantages and functions

- Every data logger can be supplied individually equipped: the station operator simply buys the input and output modules that are appropriate for their application.
- An integrated web server allows access to the data logger using standard browsers: special software is not required. Access rights control read and write access.
- Standardized ports and a variety of supported transmission protocols (HTTP, SMTP, FTP) and data formats (including XML) allow simple integration into existing and future systems and secure a long-term investment.
- Redundant communication paths ensure complete data.
- Parallel processing of the data from all connected sensors makes short sampling intervals possible.
- The large data storage capacity enables comprehensive measurements without loss of data.
- Instantaneous values and other information can be read out quickly and conveniently directly on location on the screen.
- The extremely low power consumption also allows use at remote locations.



## Various communication interfaces for the highest level of flexibility

- Integrated GPS/GPRS modem – communication via the cell phone network and/or the mobile Internet. The modem and data logger are optimally matched to each other, making an external modem superfluous
- Ethernet – direct and fast connection to the Internet (netDL 1000)
- RS-232 – for external communication devices, such as satellite transmitters
- USB – simple access to the data logger directly on location using a notebook or USB stick

## Simple configuration and setting of operating parameters

- User-oriented operating program with Setup Assistant
- Online help with information on all important steps
- Meaningful messages and internal plausibility checks
- Templates for the configuration of the individual channels

## Technical Data

### Communications interfaces

- Ethernet RJ-45 10 Mbit (netDL 1000)
- USB Host and USB Device
- RS-232 (netDL 1000: 2; netDL 500: 1)

### Sensor interfaces

- SDI-12
- RS-485 (SDI-12)
- RS-232 (optional)
- Analogue in/Analogue out (configurable)
- Status input and output/impulse (netDL 1000: 4; netDL 500: 2)
- Switched output

### IP communication

- Integrated TCP/IP stack (HTTP, FTP, SMTP, SNMP...)
- GPRS, Ethernet/DSL, PPP over landline
- Integrated web server
- Encrypted data transmission SSL/TLS (HTTPS)

### Integrated GSM/GPRS modem (optional)

Motorola G30, Audio-Codec MP3

### Operating system

RTOS with power management for minimal power consumption

### Power supply

9 ... 28 V DC (typ. 12 V DC)

### Power consumption at 12 V DC

- Sleep mode: < 250  $\mu$ A ;
- Sleep mode, impulse active: < 10 mA
- Active mode: 25 mA ... max. 400 mA (depending on configuration)

### Data memory

Storage capacity: 4 MB

### Display

- Graphical dot matrix (122 x 32 pixels)
- Controlled by jog shuttle
- LED backlight

### Status display

2 x LED (variant with integrated modem)

### Time synchronisation

NTP (network time protocol)

### Temperature range

- Operation: -40 °C ... +70 °C
- Storage: -50 °C ... +85 °C
- Internal modem: -30 °C ... +70 °C
- Display (display on): -20 °C ... +70 °C

### Relative humidity

5 ... 95 % (non condensing)

### Housing

ABS

### Dimensions (L x W x H)

- netDL 1000: 232 mm x 124 mm x 86 mm
- netDL 500: 148 mm x 124 mm x 86 mm

### Protection class

IP 41