Introducing the OTT Groundwater Sensors and Dataloggers:

Common attributes across all OTT groundwater pressure sensors and loggers include:

- Ceramic pressure measurement cell – robust and reliable, with 5 x burst pressure
- Compensated for barometric pressure, temperature, and water density
- High grade 904 L Stainless Steel – designed for use in harsh environments, like saltwater
- Simple maintenance – easily replace SIM card, and desiccant on-site without tools

All-in-one systems

OTT ecoLog 500/800
- For remote transmission of depth to water, water level, and temperature
- Conductivity measurement available with ecoLog 800
- Integrated programmable datalogger, stores up to 500,000 measurements
- Configurable alarm management for threshold monitoring
- Support data transmission via GSM/GPRS cellular using FTP, HTTP, SMS or e-mail (SMTP)

Groundwater Loggers

OTT CTD and Orpheus Mini
- For monitoring depth to water, water level, and temperature
- Available with high accuracy temperature or conductivity measurement
- Integrated programmable datalogger, stores up to 500,000 measured values
- Remote data transmission option available when paired with the OTT ITC

Pressure Level Sensor

OTT PLS
- For monitoring water level, depth to water, pressure, and temperature
- Simple integration into almost any datalogger or data collection platform
- Uses standard communication protocols like SDI-12

Shaft Encoders

OTT Thalimedes and SE200
- Continuous Measurement of water level using float-operated shaft encoder
- Available with an integrated datalogger or sensor-only for use with external dataloggers
- Integrated LCD display (Thalimedes only)
- Remote data transmission option available using the OTT ITC

Contact Gauges

OTT KL 010
- For manual measurement of depth to water
- Can be used for measuring water temperature (KL 010 TM) or conductivity (KL 010 TCM)
- Measuring Ranges: 15…750m, -1°C…+70°C, 0…200mS/cm
<table>
<thead>
<tr>
<th>Parameters</th>
<th>OTT PLS</th>
<th>OTT Orpheus Mini</th>
<th>OTT CTD</th>
<th>OTT ecoLog 500</th>
<th>OTT ecoLog 800</th>
<th>OTT Thalimedes</th>
<th>OTT SE 200</th>
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<tr>
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<td>Track movement of tracers and saltwater</td>
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</tbody>
</table>

Applications

- Salt-water intrusion detection
- Water pollution detection
- Track movement of tracers and saltwater
- Hydraulic fracturing monitoring
- Estimate groundwater recharge rates
- Aquifer storage and recovery
- Brackish water
- Corrosive conditions
<table>
<thead>
<tr>
<th>Sensor Selection Table Part 2</th>
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<tr>
<td><strong>Type of Measurement</strong></td>
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<td>-------------------------------</td>
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<tr>
<td><strong>Sensor Type</strong></td>
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<td>Temperature</td>
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<td><strong>Measuring Range</strong></td>
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<tr>
<td><strong>Power Consumption</strong></td>
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<tr>
<td><strong>Installation</strong></td>
</tr>
<tr>
<td><strong>Placement</strong></td>
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</tbody>
</table>
### Well:

- Diameter: _______
- Measuring point reference: _______
- Maximum well depth: _______
- Description of existing top cap or borehole lid: ____________________________________

### Depth-to-Water:

- Minimum: _______
- Maximum: _______

This information identifies the water level fluctuation and assists with selecting the ideal water level measurement range.

### Measurement parameters:

What data are you interested in measuring and collecting?
- Water level / Depth to water: ☐
- Water temperature: ☐
- Conductivity: ☐
- Salinity: ☐
- Total Dissolved Solids (TDS): ☐

Other information of interest?
- Power Supply: ☐
- GSM Signal strength: ☐

### Data Collection:

Is remote communication of measured data required?

What are the benefits of remote communication?
- Reduce the frequency of site visits by transmitting measured data directly to the office or a web server
- Transmit alarm messages to notify users of low battery voltage, quality assurance status messages, and user definable thresholds

In what interval do you want to take measurements? ______

How often do you want to transmit the data? ______

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### OTT Solutions

- Groundwater dataloggers
- Remote groundwater monitoring
- Groundwater level sensors
- Surface water sensors
- Groundwater sensors
- Multiparameter Sondes for surface and groundwater
- Software for communication and data management
- Web application for data management
- Tel-, Sat, GSM-, GPRS- and IP-Com
- All weather precipitation gauges
- Present weather sensors
- Pressure, radar, and bubbler level sensors
- Discharge
  - Spot measurement
  - Continuous measurement

### Established technology in Groundwater Monitoring

OTT Hydromet has been developing and manufacturing groundwater loggers, sensors, and remote communication units for over 20 years. Known for their reliability and longevity, OTT groundwater products have been field proven in thousands of installations worldwide.

OTT groundwater loggers accurately measure parameters such as water level or depth to water, temperature, and conductivity. Collected data is stored to the internal datalogger and can be transmitted automatically from the well site back to the office, using GSM or GPRS cellular technology.