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| **Submersible Pressure Transducer- Ground Water** |
| **System** |
| **Description** | System will be a complete in-pipe solution with all components inserted within a pipe.  |
| **Water Level** |
| **Range** | 0-3m (The upper range to be confirmed with purchaser) |
| **Accuracy** | ± 2 mm |
| **Resolution** | 1 mm |
| **Precision/Stability** | ± 1 mm/year |
| **Signal Output** | SDI-12, 4-20mA, or voltage to be compatible with data collection platform |
| **Calibration** | Calibration certificate required. Future recalibration (if needed) must be performed in India. This must be certified by bidder.  |
| **Cabling** | vented (length will be determined based on site survey or at the time of installation) |
| **Temperature** |
| **Range** | 0 – 40 ˚ C |
| **Accuracy** | ± 0.5 ˚ C |
| **Resolution** | 0.1 ˚ C |
| **Precision/Stability** | ± 0.5 ˚ C/year  |
| **Internal Data Logger** |
| **Data Storage** | Water level and Temperature from once per minute to once per day, user programmable. Required to store one year of time-stamped data taken hourly for both temperature and water level. |
| **Data Transmission** | GSM/GPRS from text and/or FTP (or SFTP) from once per hour to once hour to once per week. |
| **GPS** | Built in GPS which can be programmed to sync the time and provide the location (latitude/longitude) of the data logger. The location will be required to be transmitted through the GSM/GPRS. |
| **Communication Interface** | IrDa or Bluetooth |
| **Dimension** | ≤ 55 mm in diameter |
| **Special Feature** | * Ability to set stage using a mobile device such as a PDA, Tablet, or Smartphone with a point and click application (Fully describe the application to set stage)
* Ability to turn on/off GSM/GPRS application using a mobile device such as a PDA, Tablet, or Smartphone with a point and click application (Fully describe the application to turn on/off GSM/GPRS)
* Ability to change data transmission rates within the range of once per hour to once per week using a mobile device such as a PDA, TABLET, or Smartphone through an Application (APP). Fully describe the application to change transmission rates.
* Requirement to download data through IrDa or Bluetooth connection using a mobile device such as a PDA, TABLET, or Smartphone through an Application (APP). Fully describe the application to download data.
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| **Data Communication** |
| **Modem** | GSM/GPRS compatible with frequencies available in India (Provide data sheet or example of compliance) |
| **Integration** | Modem will be integrated into the data logger enclosure |
| **Antenna** | Built in weatherproof with no external appearance of an antenna |
| **Power** |
| **Type** | Self-contained (no external charging device required) |
| **Voltage** | ≤ 12 V DC |
| **Batteries** | Commonly available in India (i.e. 1.5V AA, AAA, C, or D cells) |
| **Operational Life** | Data Measurement once per hour, Logging once per hour, GSM/GPRS data communication 1 per day, batteries required to operate for one year before replacement |
| **Environmental** |
| **Protection** | Sensor IP-68, Data Logger IP-68 if submerged with pressure transducer |
| **Humidity** | 0 to 100% operational and storage |
| **Temperature** | 0 to 50 ˚ C operational / -10 to 70 ˚ C storage |

Items in RED are to be used for the Bid Evaluation Review (BER).