

Grundfos Remote Management (GRM) Specifications & Requirements

GRM commissioning will include the below criteria unless specified otherwise.

1. Initial GRM setup on site
2. Setting up Installation page on GRM Web Server
3. Setting up alarm schedule and notifications

Pump Station Remote Monitoring and Control System

- 1.1. The pump station Remote Monitoring and Control system shall be an internet-based platform. It will be able to provide the monitoring, control, and data management of the pumping system.
- 1.2. The Remote Monitoring and Control system shall provide remote access to all relevant data and alarms from pumps, pump controllers and auxiliary equipment like sensors and meters.
- 1.3. Data from pump installations is cyclically transferred wirelessly via a 3G/4G wireless modem or through a hard-wired internet connection to a centrally hosted database and published to subscribers on a secure web server provided by the supplier.
- 1.4. Users have access via Internet to data from pump installations that are registered to their own account.
- 1.5. The monitoring system is able to send out SMS / Email alarms to defined on-call site personnel.
- 1.6. The system requires a direct hard-wired internet connection or may use on-site 3G/4G coverage on a mobile telecommunications network, a 3G/4G data-modem connected to the pump system and wireless antenna.
- 1.7. The end-user or Equipment operator shall provide the necessary hardware such as PC/ tablet-PC / Laptop or Smartphone with web browser and internet connection.
- 1.8. The system shall be capable of operating and functioning as follows:
 - a. Complete Overview – See the status of your entire system(s) on a map or any digital image.
 - b. On- Line with your pumps - remote monitoring, analysis and adjustments via PC / tablet-PC / Smartphone, (web browser and internet connection is needed).
 - c. Trends and reports - Follow system performance and reveal system problems as they happen.
 - d. Automatic event log and service log for all pumps in the system
 - e. Shared documentation - Upload system documentation to a secure server and make it accessible to all relevant personnel.
 - f. Flexible on-call schedule - Easy of personnel who responds to SMS/ email alarms in rotating weekly schedules.
 - g. Manage Pump Maintenance - Plan service work based on actual operating data and get notification when service is due.
- 1.9. The hardware shall be based on the similar protocol communication platform as the pump manufacturer to ensure the data communication reliability.