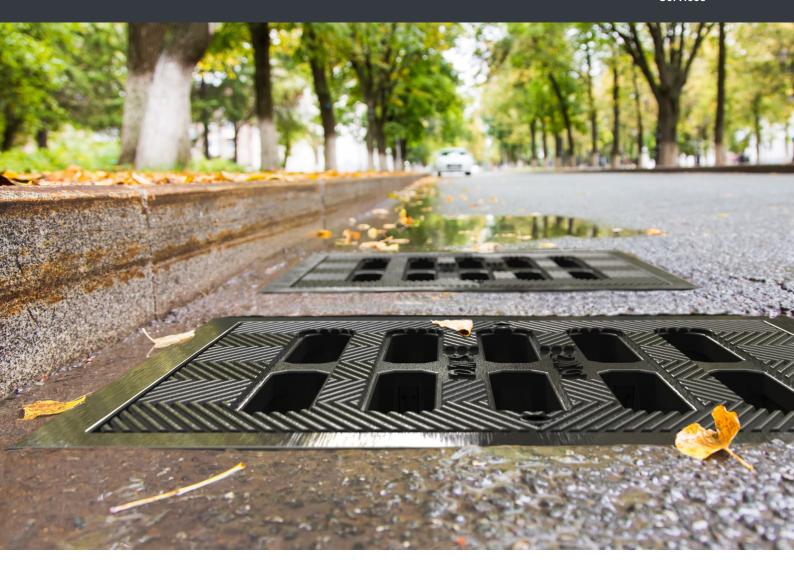


DMS Smart Gully

Composite gully grates with encapsulated sensors

Drainage Management Services



Product Introduction

The DMS Smart Gully is a patented technology using D400 composite gully grates with embedded sensors to monitor the drainage environment. The system provides the space and strength needed for a reliable sensor platform, sending back vital data. DMS Smart Gully offers plug and play simplicity for setup and monitoring. DMS offers expansion options and optional capability for control of sensor nodes via bluetooth.

- Fully encapsulated depth sensor for advanced warning of overflows.
- Ultra-long life: 5+ years and Over The Air (OTA) updates.
- · Cellular communications: No additional communications system.
- Composite material: Easy installation, low-noise, anti-slip.
- · Easy to replace sensor unit. Allows unit to be moved and upgraded.
- Advanced sensor device with Over The Air (OTA) configuration.





RAILWAYS







PUBLIC SECTOR

INDUSTRIAL

DMS Live Grid Benefits



In-built device is extremely durable – doesn't suffer the fragility issues associated with external sensors



Composite material is light, but robust and D400 rated



Uses cellular (2G, GPRS), and low power cellular (4G, NB-IOT, CAT-M1) comms with all UK networks, so no requirement for additional infrastructure



Depth and blockage sensors takes & transmits regular readings.



Movement sensor alerts when grate has been lifted. Useful for both safety, and confirmation that scheduled activity has been performed



Intuitive online portal maps all your devices. Allows you to see the changes in water level and temperature in each device over time, including rate of recovery after surge conditions



Azure & AWS supported, so data can be fed directly into other asset management systems if required



Configurable alerts provide email/text updates when the chamber is experiencing an unusual increase in water level



Temperature sensor informs decisions on road gritting



Data is fully encrypted at source, not only complying with current data security guidelines, but future-proofing against more onerous requirements



Sensor expansion capability (e.g. gas sensors)

Sensor Specification

| Category | Details |
|---------------|---|
| | |
| Sensors | Ultrasonic Distance Accelerometer, MEMS + Wake Thermocouple 0.5°C accuracy Grate Blockage Sensors Options: mmWave radar HC sensor BLE Controller |
| - | Ask for more |
| Power | 5+ year lifetime OTA power plans Hi grade Li-SoCl2 battery End of life monitoring 30uA sleep consumption |
| Battery | RTB Replacement |
| Environmental | IP68 Encapsulation -20°C to + 70°C |
| Connectivity | NB-IoT CAT-M1 2G and GPRS Low power Wi-Fi Ask for more |
| Security | AES256 encrypted bootloader Digital signing of verified code TLS 1.2 End to End encryption |
| Other | FOTA Updates with delta RFID ID tag included Ultra-low power micro Large internal memory Multi-protocol expansion port |

Physical Specification

| Available Options | Details | |
|---|---|--|
| | | |
| Composite Grate and Frame | | |
| Square | | |
| DMSGRIDS DMSGRIDB | D400 Opening 342x396 Over Base 475 x 600 D400 Bolt Down Opening 342x396 Over Base 475 x 600 | |
| Please see DMS Grid datasheet for details | | |
| Other | | |
| | Please Enquire | |

Data / Platforms

| Available Options | Details |
|---|---|
| | |
| Platforms | Microsoft Azure AWS PTC Thingworx |
| | Ask for others |
| | |
| Interfaces | UD Live Portal UD Live API Confirm® |
| | Custom Integrations |
| Please contact us to request additional product information for | |

Please contact us to request additional product information for the grates we supply. Additional information such as certifications is available upon request.

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