

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



UTILITIES



RAILWAYS



PUBLIC SECTOR














RESIDENTIAL



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	D400 Opening 342x396 Over Base 475 x 600
DMSGRIDB	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 the grates we supply. Additional information such as certifications is available upon request.

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