

ATEX MSFM LITE DEPTH TRANSDUCER MONITOR S2U

Detectronic's MSFM Lite Depth Transducer Monitor is specifically designed to measure liquid level in boreholes, reservoirs and tanks. It is suitable for clean water applications and sites which are located in sewers or other potentially explosive atmospheres.

Certified to ATEX/IEC Ex Zone 0.

It uses power saving technology developed by Detectronic to provide up to 5 years of battery life; significantly longer than competitive systems and more cost effective than traditional wired telemetry.



The MSFM Lite's two main components; the pressure transmitter and GSM/GPRS data logger are connected by a cable length specified on purchase. This allows the sensor to be positioned at the optimum depth without unnecessary waste cable coiled at the top. The data logger should be located just under the chamber cover or in suitable above-ground kiosk.

HOW IT WORKS

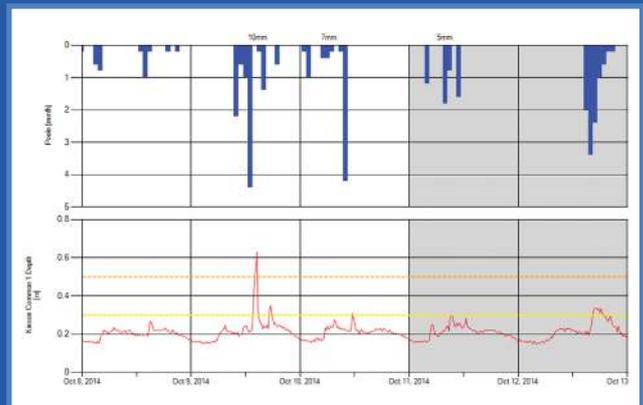
The depth is determined from the measured hydrostatic pressure of the liquid above the transducer.

If the sensor cannot be installed at the invert or empty position then a known offset is programmed and added on to all recorded readings.

The data is read and recorded by the MSFM Lite at predetermined logging intervals set by the user.

Thanks to its custom-designed antenna, which improves signal sensitivity in underground locations, logged data is then transmitted via GSM/GPRS at user-selectable intervals [typically once an hour, once a day (default), once a week or once a month].

WWW.DETECDATAPRO.COM



For more information about the MSFM Lite and Detectronic, please call: **+44 (0)1282 449 124** or email: industrial@detectronic.org or **SCAN THE CODE**

ATEX MSFM LITE DEPTH TRANSDUCER MONITOR S2U

FEATURES

- IS certified (Europe and worldwide)
- Embedded GPRS remote data delivery
- Worldwide roaming data tariffs
- Pressure transducer interface multiple ranges and cable lengths
- 2 spare logger channels (e.g. water meter/intruder alert)
- 5 years battery life for GPRS comms, logger and sensor
- Hi/low alarms with 'send latest data' feature
- Hi/low alarms with local output (e.g. sampler)
- IP68/NEMA 6P construction
- Military specification connectors
- Custom internal hi-gain underground antenna
- External antenna option (for marginal signal sites)



TECHNICAL SPECIFICATION

Depth Sensor (PTI) Pressure Transducer Interface

Ranges available between 0-3m and 0-100m
Cable length as required (minimum 10m)
Accuracy dependent upon pressure range, typically +/-0.1% F.S.
Resolution: +/-1.0mm

Data Logger and GPRS/GSM Communication

Memory: solid state 128K - 60K per channel (rotating store or store until full)
Recording interval programmable between 1 minute and 1 hour
GSM/GPRS communication (worldwide compatibility):
900MHz, 1800MHz integral antenna (worldwide except North America)
850MHz, 1900MHz integral antenna (North America)
Data transmission: GPRS - 15 minutes, hourly, daily (default), weekly, monthly at programmable intervals
Data logger power supply: 5 years typical life span internal lithium battery pack (user replaceable)

Alarm Dial Out

High/low threshold and profile alarms with 'send latest data' with alarm message

Additional I/O

2 analogue/digital input channels
1 pulse output

Environmental

Operating temperature: -20°C to +60°C
Protection: IP68 / NEMA6P
Connectors: IP68 Mil - Spec
Dimensions:
MSFM Lite - L = 280mm x W = 150mm x D = 100mm
Weight: minimum 3.5kg (including sensor and 10m cable)

Approvals (MSFM Lite)

SIRA 12 ATEX 2110X Ex II 1G Ta -40°C to +60°C
IEC Ex SIR 12.0044X Ex ia IIB T4 Ga Ta -40°C to +60°C

Approvals (Pressure Transducer Interface)

SIRA 14 ATEX 2027X Ex II 1G Ta -40°C to +60°C
IEC Ex SIR 14.0013X Ex ia IIC T4 Ga Ta -40°C to +60°C

GSM Communication Certification

IC: 2417C-SL6087
FCC ID: N7NSL6087

Detectronic systems and products are certified and audited to the following standards:



Detectronic Limited
Regent Street
Whitewalls Industrial Estate
Colne, Lancashire BB8 8LJ

T: 01282 449 124
F: 01282 692 002
E: industrial@detectronic.org
W: www.detectronic.org



Working with you
to **reduce costs**
and **aid compliance**

SUPPLY

INSTALL

MAINTAIN

MONITOR

ANALYSE

REPORT