



WATCHLOG PRO

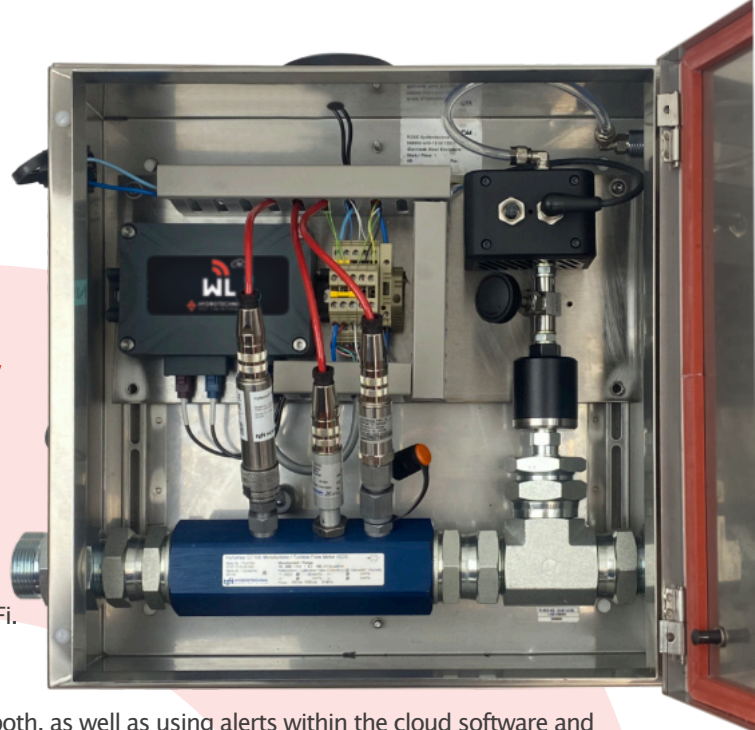
Hydraulic System Monitoring


REMOTE MONITORING CLOUD GATEWAY WITH INTEGRATED PRESSURE, TEMPERATURE, FLOW AND OIL CLEANLINESS OPTIONS


When integrated into your hydraulic system, a Watchlog PRO Hydraulic System Monitoring unit will continuously transmit flow rate, pressure, temperature and optionally oil cleanliness to the cloud, or by request to a custom web server via 4G (SIM card) or Wi-Fi.


Sensor readings can be viewed and saved using our online cloud platform, accessible via most web browsers. Customisable alerts are possible both locally, using a light tower, buzzer or combination of both, as well as using alerts within the cloud software and with SMS messaging.

Installed inline within your setup and powered by 24VDC, the Watchlog Pro Hydraulic System Monitoring unit is a one-stop solution for your remote hydraulic monitoring needs.



 Integrate the Watchlog Pro Hydraulic System Monitoring unit directly into your existing system using the exterior inlet and outlet ports and supply 24VDC power.

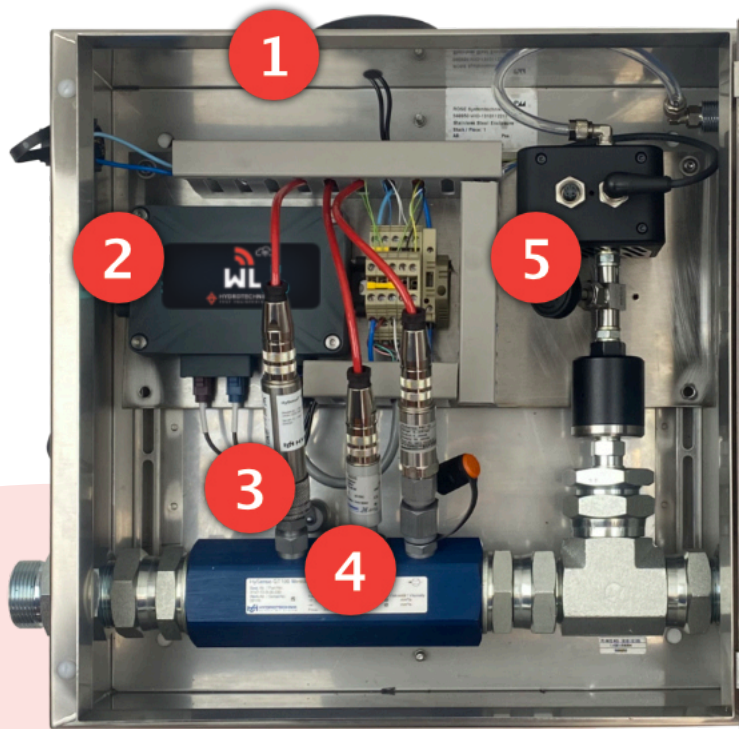
 The integrated Watchlog Pro QUAD seamlessly transmits sensor data to the cloud and locally triggers buzzer and/or light tower alerts, if installed.

 Our powerful cloud platform allows sensor data to be monitored and logged in customisable dashboards and alerts, as well as sending SMS notifications for system events.





WATCHLOG PRO Hydraulic System Monitoring Features



1

Stainless Steel Enclosure with external antenna

A rugged enclosure, built for industrial environments, allows connectivity to your hydraulic system via exterior ports.

2

Watchlog Pro QUAD Cloud Gateway

The integral component of the unit, the Watchlog Pro QUAD, accepts all sensor data before transmitting it to the cloud via WiFi or 4G.

Local, configurable buzzer and/or light tower alerts are also triggered by the QUAD.



3

Temperature & Pressure Sensors

A $-50...200^{\circ}\text{C}$ temperature sensor is included with pressure sensors ranging from $-1...6$ bar up to $0...400$ bar available.



4

Flow Meter

A high-quality aluminium flow turbine for accurate flow measurement from $0...20$ l/min to $0...600$ l/min, up to 100cst of viscosity, is included.



5

Oil Cleanliness Monitor

The optional S120 Digital Imaging particle counter adds oil cleanliness readings to the system displayed as ISO codes.





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Technical Specifications

Power	External supply: 24VDC	
Flow meter options	Flow rate	Exterior port size
	0...20 l/min	¼" BSP
	0...75 l/min	¾" BSP
	0...300 l/min	1" BSP
	0...600 l/min	1¼" BSP
Temperature sensor	-50...200°C	
Pressure sensor options	-1...6 bar, 0...60 bar, 0...250 bar and 0...400 bar	
Max pressure	350 bar	
Oil Cleanliness	Optional S120 Digital Imaging particle counter reading ISO codes	
Additional sensors	GPS, Accelerometer for pitch, roll and vibration Ambient temperature, and voltage monitoring	
Monitoring	Use the Watchlog Portal to view and store data and configure and update devices Optional SMS notifications	
Buzzer volume	95db	
Network	4G LTE CAT-M1 (QUAD-C2-G) / 4G LTE CAT-1 (QUAD-C2-H) SIM card holder for Micro-SIM (internal soldered SIM optional) Wi-Fi (QUAD-C2-W) Endpoint: Watchlog Portal and 3rd party MQTT(S), HTTP(S), UDP servers	
Mechanical	Flow rate	Dimensions
	0...20 and 0...75 l/min	Width: 300mm, Height: 400mm, Depth: 100mm
	0...300 and 0...600 l/min	Width: 400mm, Height: 400mm, Depth: 100mm
		Height with Antenna: 417.5mm
		Height with Buzzer: 494mm
		Height with Light Tower: 562mm
		Light tower radius: ∅ 50mm



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Ordering Code

Use the following lookup tables to create an order code for your requirement.

WLPROHSM - **PW** - T - **QX** - **Y** - **Z**

Replace PW with	Pressure range
P1	-1...6 bar
P2	0...60 bar
P3	0...250 bar
P4	0...400 bar

Replace QX with	Flow rate
Q1	0...20 l/min
Q2	0...75 l/min
Q3	0...300 l/min
Q4	0...600 l/min

Refer to the specifications table to determine the exterior port size and overall enclosure size for each flow meter.

Replace Z with	Alert option
X	None
W	Buzzer
Y	Red & Green light tower
Z	Buzzer and Red & Green light tower

Replace Y with	Particle Counter
X	None
A	S120 Particle Counter

Example Ordering Code

The following part code would be used to order a hydraulic system monitor with a 0...400 bar (**P4**) pressure sensor, 0...300 l/min flow meter (**Q3**), S120 particle counter (**A**) with a buzzer and red & green light (**Z**):

WLPROHSM-P4-T-Q3-A-Y