

MachineWatch® Oil Condition Monitoring Sensor and Data Acquisition Unit



Technical data:

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Measurements ¹	
Polarity	0-255 (unitless)
Conductivity	0-255 (unitless)
Relative Humidity	0-100 % Saturation
Temperature	0 - 150 °C
Total Acid Number (TAN)	Set point adjustable ²
Wear Metals	Set point adjustable
Data output	
Modbus RTU over RS485	SDAU version only
CAN bus	SDAU version only
Cellular (HTTPS)	CDAU version only
Cellular (MQTT)	CDAU version only
Environmental conditions	
Normal operating temperature range	+20 to +80 °C
Ambient operating temperature range	-20 to +70 °C
Fluid compatibility	Suitable for hydraulic and lubrication oils
	Suitable for cold started equipment
Protection class	IP 67
Other data	
Supply voltage	12 to 24 VDC
Current consumption without outputs	~100 mA
Mechanical connection options	M22 x 1.5 (metric); ¾" (BSPP); ½" (NPT)
Dongle material	304 SS
DAU material	PA66 GF 15
DAU mounting style	Screw mount

¹ Oil Advantage utilizes a novel scale of 0-255 for polarity and conductivity readings. The scale is intended to monitor relative changes in oil condition working off a known baseline in a clean oil.

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² Oil Advantage works with customers to empirically define setpoints specific to their operations

Dimensions:

Dongle **Data Acquisition Unit** 85 58 102.4 58.9 46.9 75.02 min M22 x 1.5 50.8 101.6 With antenna (CDAU only) 9 59.4 Without antenna (SDAU only) 118.8

Product codes

MW-XDAU-XX-V0X

S = Serial wired connectivity

C = Cellular wireless connectivity

MB = Modbus RTU over RS485 (SDAU - serial device only)

CB = CAN bus (SDAU - serial device only)

MT = MQTT over cellular (CDAU cellular device only)

HT = HTTPS over cellular (CDAU cellular device only)

1 = Product hardware version

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