

Guardian Monitoring

SPECIFICATIONS FOR OUR SINGLE-GAS (G1) MONITOR FOR TRANSFORMERS

MONITORED PARAMETERS IN OIL

	Hydrogen (H ₂)	Moisture (H ₂ O) ¹	Temperature
Sensor	4400-MM03-1	HC100-400	Pt1000 DIN A
Range	0 to 5000 ppm	0 to 100 ppm	-40 to 80° C
Accuracy	±20% or 25 ppm	±2% or 2 ppm	±0.2° C (at 20° C)
Repeatability	± 10% or 15 ppm	N/A	N/A

¹Measured as water activity (a_w); upper range limited to saturation

PHYSICAL SPECIFICATIONS

Dimensions	Enclosure: 10.6h x 8.6w x 7.0d in. / Overall: 12.3h x 8.6w x 13.4d in.
Weight	13 lbs. (5.9 kg.)
Enclosure Rating	NEMA 6P & 13, IP68 of IEC 529
Connection	1.5 inch NPT

PERFORMANCE

Oil Sampling Rate	Continuous oil sampling; data reported every 30 minutes
Response Time	Less than 60 minutes (90% of step change)
Data Storage	On-board storage of 180 days; remote storage of unlimited duration
Life Expectancy	More than ten (10) years

OPERATING CONDITIONS

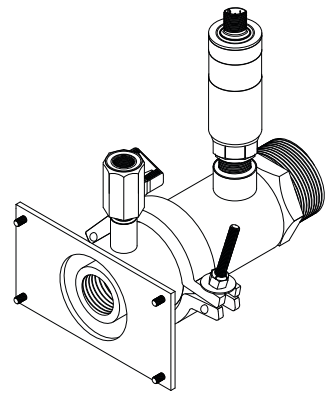
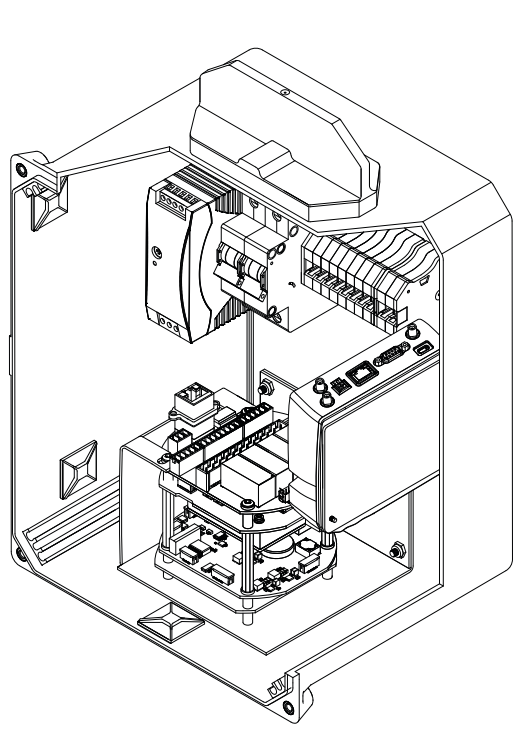
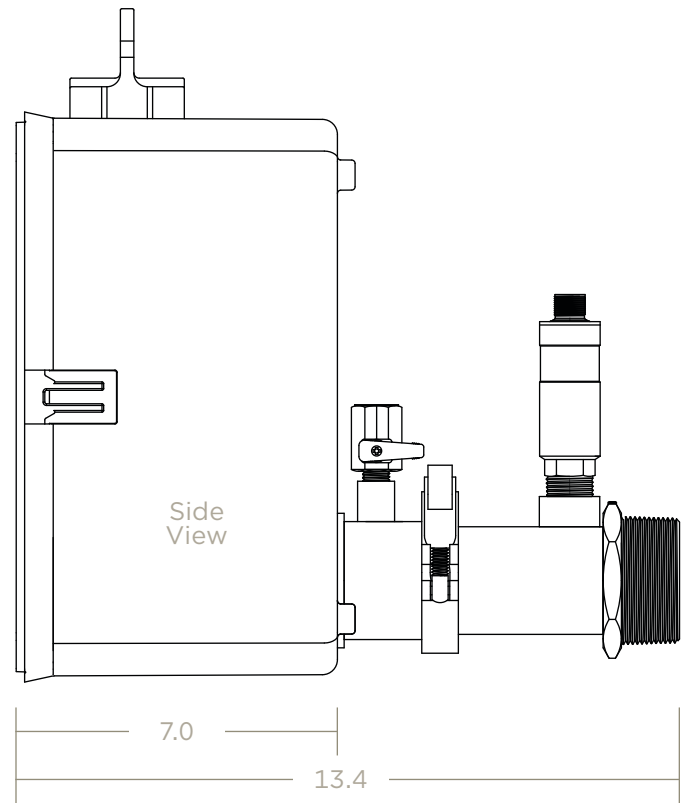
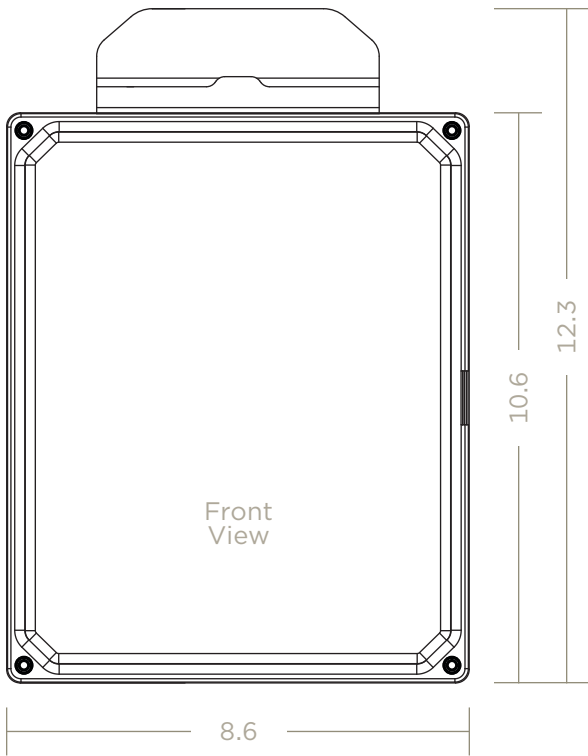
Oil Type	Mineral Oil
Oil Temperature	-20 to 55° C (-4 to 131° F)
Oil Pressure Rating	Max 3 bar (43.1 PSI); min 0.1 mbar (0.001 PSI)
Ambient Temperature	-40 to 60° C (-40 to 140° F)
Ambient Humidity	5 to 95% (not condensing)

ELECTRICAL SPECIFICATIONS

Power Supply	110 VAC ±10%, 50–60Hz, < 2 Amps max.
Communication	Modbus RTU supported on Ethernet (RJ45) protocol over a VPN (Encrypted Virtual Private Network)
Analog Inputs	Two (2) analog inputs, 4 to 20mA or 0 to 5V

ENGINEERED SERVICE SPECIFICATIONS

Data Management	Transformer Dashboard® via web-enabled device
Engineering Support	Review data and diagnostic tools Customized alert and alarm limits Direct customer contact Monthly monitor communication update



WITH MORE THAN 50 YEARS OF EXPERIENCE, SDMYERS IS THE INDUSTRY LEADER IN INTELLIGENT TRANSFORMER MANAGEMENT. OUR MAINTENANCE PHILOSOPHY ENSURES MEASURABLE AND SUSTAINABLE TRANSFORMER RELIABILITY.