



PumpSense™

Vacuum Pump Health Monitoring for Plastics Processors

✓ On-Premise Data

✓ No Cloud Required

✓ No Subscription Fees

✓ Works With Existing Plant-Wide Systems

Nobody Is in Your Pump Room. PumpSense Is.

Your pump feeds several machines, and most plants have no spare. It's the water heater in the basement — nobody looks at it until it fails, and by then the damage is done. PumpSense stays in the pump room around the clock and warns you weeks ahead, in plain words.



*The only dedicated pump health monitoring
for material handling in plastics processing.*

Pump failures are never sudden. They're just unwatched.

Bearing wear — builds for weeks, then accelerates. By the time you can hear it, you're days from failure.

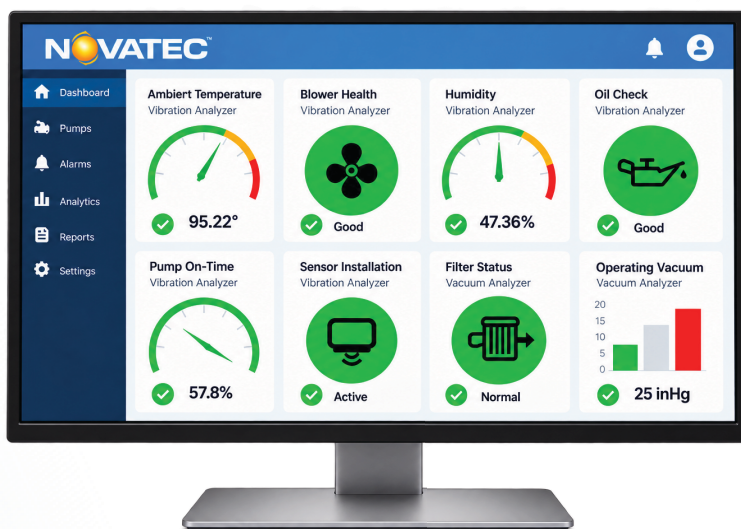
Filter restriction — a starved pump pulls harder, driving temperature, vibration, and oil breakdown at once.

Oil degradation — heat and wear particles cut lubrication until seals fail and components seize.

What PumpSense is watching

Six readings from every equipped pump, on one screen, wherever you are — each one a weeks-early signal of the failures above.

- ✓ Ambient temperature
- ✓ Blower health
- ✓ Humidity
- ✓ Oil check
- ✓ Operating vacuum
- ✓ Filter status



*Pre-trained on more than a decade of pump data.
No learning period — accurate from day one.*

A repair on your schedule costs a fraction of the same repair as an emergency.
PumpSense is how you get to choose which one you pay for.

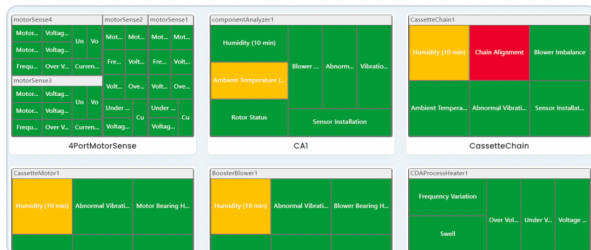
Optional Master DataHub for multiple pumps

Every PumpSense pump in the plant, gathered, visualized, and turned into something a person can act on — without a byte leaving your network.

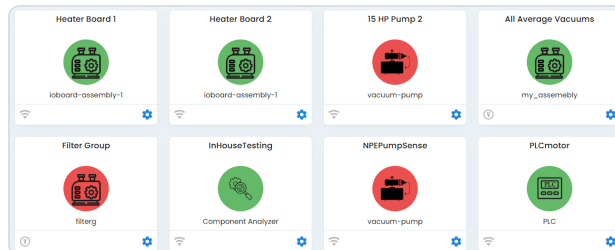
- ✓ **One Hub** per 15 pumps
- ✓ **Your network** no cloud, no subscription
- ✓ **Required** for any output beyond the on-pump lights



Plant-wide heat map: red drills down to the pump & parameter behind it.



Custom gauges: every pump's filter status in one gauge. Green means all fine, red means one or more aren't.



The Pump Analyzes. The Hub Shows You.

Nothing leaves the building.



PUMP
Analyzes



MASTER DATA HUB
Collects and displays



YOUR SCREEN
Browser, FT2 / FX3, or your SCADA

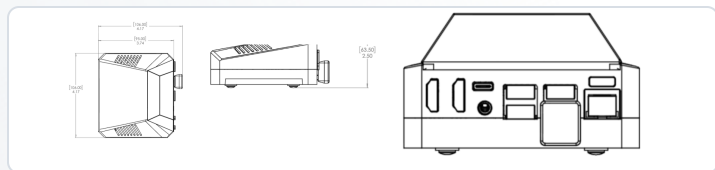
Specifications: Monitored Parameters

Parameter	Detects	Prevents
Vibration	Bearing wear, imbalance, misalignment	Seized bearings, catastrophic failure
Oil	Contamination, degradation, low level	Overheating, seal failure, component seizure
Temperature	Overheating, excessive load	Accelerated blower and motor wear
Filter Restriction	Clogging and airflow restriction	Overwork, energy waste, downstream stress
Vacuum Level	Loss of vacuum capability, leaks, seal wear	Conveying starvation, hopper run-out
Runtime / Utilization	Duty beyond safe limits	Unplanned service intervals

PumpSense uses multiple sensing technologies combined with predictive models. You cannot put a single sensor on a pump and predict what this predicts.

PumpSense Sensor Package

Mounting	Integral to pump; factory-installed
Supply voltage	Powered by the pump's 24 VDC control voltage — no external power source required
Status indication	Green / amber / red status indicators (Infinity Series)
Onboard data retention	Local buffer; Master Data Hub required for full history
Network interface	Single Ethernet port
Compatible pump models	All Novatec positive-displacement pumps — VPP, SVP, UVP, MVP



Master Data Hub — dimensions in inches [mm]

Master Data Hub (MDH)

Quantity required	One per 15 pumps
Maximum pumps supported	Up to 15 pumps
Dimensions (H × W × D)	4.17" × 4.17" × 2.50" (106 × 106 × 63.5 mm)
Weight	0.7 lb
Supply voltage	100–240 VAC, 50/60 Hz, 0.8 A
Connectivity	Ethernet — two ports: Novatec equipment + customer network
User interface	Browser-based; any computer on the local network
Interfaces	Local browser · FT2 / FX3 · SCADA/MES via RESTful API
Local data retention	90 days
Export formats	CSV from any graph; RESTful API for SCADA/MES; relational database for direct query
Cloud connectivity	Not required and not used

Ordering Information

PumpSense Sensor Package — standard on Infinity Series ultra-quiet vacuum pumps; add-on to any Novatec pump series.

New pumps preferred — baseline operating conditions are established from the first hour of runtime.

Compatible Novatec Controllers — FT2 touchscreen controller · FX3 central control system

Master Data Hub — one-time purchase, one per 15 pumps.

Retrofit possible — certain other Novatec pumps qualify; contact Novatec to confirm compatibility.