

GE Energy

# Is your motor trying to tell you something?

Find out with Remote Monitoring & Diagnostics



imagination at work

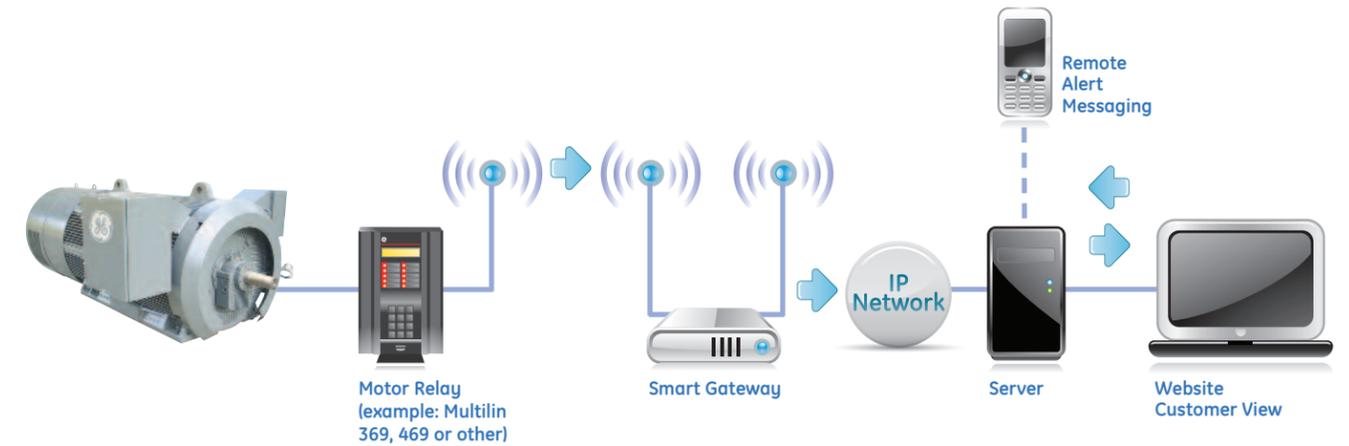
Is a critical motor in your plant trying to tell you something? It might be saying that heat and vibration are pushing it toward total failure but, if you can't hear it, you wouldn't even know until it's too late.

At GE, we've not only learned to speak motor fluently, we can listen in from far away, with Remote Monitoring & Diagnostics, or RM&D. Through a simple network, your motors continuously report a wide range of conditions to our monitoring center. So when your motors say something important, we hear it, we understand it, and so do you. Immediately.



### How we monitor your motor's condition

RM&D works with all industrial motors that are attached to a control device that outputs data via Modbus, e.g., GE Multilin 369, 469, M60 or various other manufacturers' relays. Sensors attached to the motor measure vibration (four inputs), temperature (eight inputs), voltage and current. They send these data via a secure one-way cellular network to GE's RM&D server. When data move outside pre-established parameters, alerts are sent both to GE motor specialists for analysis and directly to you.



### What you can learn from that

- Motor torque
- Motor speed
- Electrical efficiency
- Current signature analysis (induction motors only)
- Voltage and current harmonics analysis
- Number of starts/trips (depending upon relay)
- Run time
- Power factor display

### How that helps you

#### Optimizes your maintenance resources

- Streamlines preventive maintenance by focusing on actual conditions
- Minimizes the risk of introducing failure due to maintenance errors
- Prioritizes attention of your most critical assets
- Reduces personnel exposure to possible safety hazards

#### Leverages financial resources

- Avoids expensive enterprise-wide software/hardware purchases and integrations
- Reduces rewind cycle times because needed parts can be ordered in advance
- Lowers the risk of catastrophic failures
- Helps extend the lifecycle of critical assets
- Reduces maintenance costs and unscheduled outages

#### Installs easily

- Installs quickly with minimal disruption to operations
- Limited footprint – installs on any accessible DIN rail
- Compatible with universal Modbus protocol
- Single screen view for single or multi-facility operations



## What makes GE's RM&D better

- A world class M&D center collecting and monitoring customer motor data 24/7
- A global motor-application knowledge network of field engineers
- A rich history of motor manufacturing and repair services
- GE proprietary software
- Advanced predictive maintenance practices
- Comprehensive semi-annual reports available
- Comes with priority service at GE repair services shops
- Web-based customer access to current and historical motor performance
- Immediate alerts sent to GE and customer personnel
- Trending and forecasting help to identify latent failure indicators

## What it all means

**LISTEN.** With RM&D, you'll get:



*Doesn't that sound good?*

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GEA19212 (08/2011)