



Perpetua Power Puck™ Energy Harvesters

Applications and Benefits

Perpetua Power Pucks™ harvest energy to power GE wSIM* Essential Insight.mesh* devices for more than 20 years of maintenance free operation. Using readily available heat from pipes and other common equipment such as pumps, fans and motors, Power Pucks™ continuously convert any source of heat into electric energy. A temperature difference of 20°C / 68°F between the warm surface and ambient air provides ample power to meet the requirements of wSIM devices. Designed to meet GE's rigorous standards, Power Pucks™ eliminate battery replacements and offer a worry-free alternative for operating your wireless sensor networks for decades.

Installation

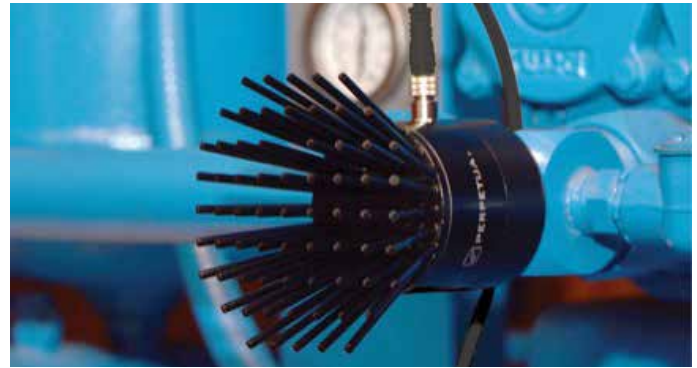
Using the standard magnetic base, most Power Puck™ installations take less than a minute. Magnetic mount installations can be described in just three steps: 1) connect the cable to the Power Puck™; 2) place the Power Puck™ on a warm, magnetic surface; and 3) connect the Power Puck™ to the wSIM device. If you have other mounting requirements, please contact your GE representative.

Features

- Replaces batteries with continuous, long-life renewable energy harvesting
- Allows for frequent data collection, enabling the most demanding sensor applications



GE Part Number (GE 102M7936-01)
Battery Modules with External power input: GEP/N: 185547-02



- Lowers total cost of ownership by eliminating multiple battery replacements for each wSIM device
- Uses readily available heat to generate renewable, reliable energy
- Quick installation for both new sites and retrofits
- Seamless operation with the GE External Power Module battery backup to guard against any temporary interruptions in temperature availability
- Solid-state design for maintenance-free operation
- Environmentally friendly alternative to disposing of used sets of batteries

Technology

Power Pucks™ are energy harvesting thermoelectric systems that continuously convert heat from pipes and industrial equipment surfaces into electric energy. A small temperature differential of just 20°C is all that is required for Power Pucks™ to deliver continuous self-sustaining energy for Insight.mesh wireless systems.

Intrinsically Safe Certifications

USA – Class I, Division 1, Groups A, B, C, and D; Class II, Division 1, Groups E, F, and G; Class III, Division 1; Class I, Zone 0, AEx ia IIC T4

Canada – Class I, Division 1, Groups A, B, C, and D; Class II, Division 1, Groups E, F, and G; Class III, Division 1; Class I, Zone 0, Ex ia IIC T4
T4: -45°C ≤ Ta ≤ +65°C

EMC, RoHS and IP67 certified

CEI/IEC 60529:2001, 2004/108/EC, 2011/65/EU

For additional information, please contact your local GE Representative. Visit www.ge-mcs.com/bently

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