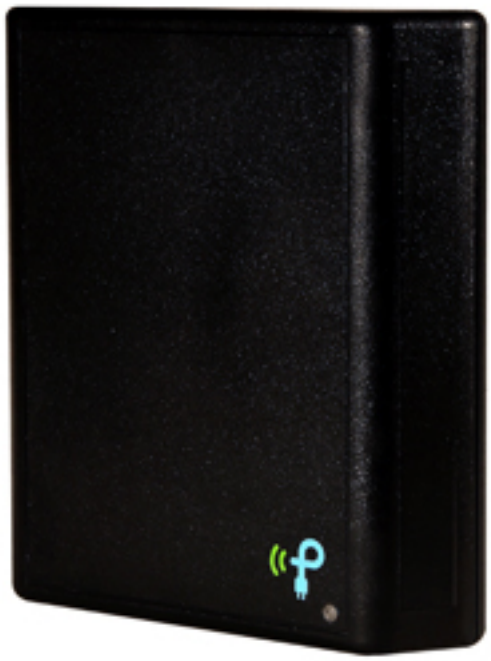
Transmitter Sends Power, Data for RF Energy Harvesting and Wireless Power Systems



Powercast Corporation announced availability of its TX91501 Powercaster Transmitter which uses the 915-MHz ISM band to transmit common radio waves for power and data in commercial, industrial and defense applications. As the power source for the company's RF energy-harvesting wireless power solution, the transmitter broadcasts power and data over 40 feet to its companion Powerharvester receivers. Embedded into micro-power devices such as wireless sensors, instrumentation and controls, the Powerharvester receivers convert the received RF energy into DC power for battery-free operation or to wirelessly trickle charge batteries. The receivers also output the data broadcast from the TX91501 as well as the received signal strength indication (RSSI). Initial versions of the transmitter will broadcast a unique ID for device authentication or location-tracking applications, while future versions will also transmit data such as timestamps for end-device synchronization and control. This transmitter is approved by the FCC (Part 15) and Industry Canada. It can be used to broadcast RF energy for both power and data in numerous energy-harvesting applications such as environmental monitoring, building automation, energy management and industrial monitoring. The RF signal uses Direct Sequence Spread Spectrum (DSSS) modulation for power and Amplitude Shift Keying (ASK) modulation for data. The TX91501 is available in versions with an output of 1 W or 3 W Effective Isotropic Radiated Power (EIRP).

Powercast Corporation
800 963 6538, www.powercastco.com [1]

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