GE Energy

Reuter-Stokes 131
Environmental Radiation Monitor

Solid Performance

Designed to measure low-level airborne gamma radiation, this Environmental Radiation Monitor (RSS 131) is the latest High Pressure Ionization Chamber (HPIC) from GE Energy. With over 30 years of service in multiple utility and environmental radiation monitoring applications around the world, Reuter-Stokes Environmental Radiation Monitors continue to provide reliable operation in extreme climates. Versatile, robust and reliable, the RSS 131 is ideally suited for use in Homeland Security applications.

A Full Package

Features typically required for a fully functional system are packaged "in the box." The system is equipped with three weatherproof RS-232 ports and an optional dial-up modem. Although units are often operated as stand-alone systems, many have been incorporated into environmental monitoring stations and may be used in Homeland Security monitoring applications. GE Energy offers meteorological monitoring options, including wind speed/direction, a rain gauge, and barometric pressure.

Customer Configurable

The user has the option to specify parameters such as alarm limits, unit address, and data recording interval (1 sec – 9 hours). This is accomplished via one of the serial interface ports using a PC – there is no need to open the weatherproof enclosure to make these adjustments, enabling straightforward customization.
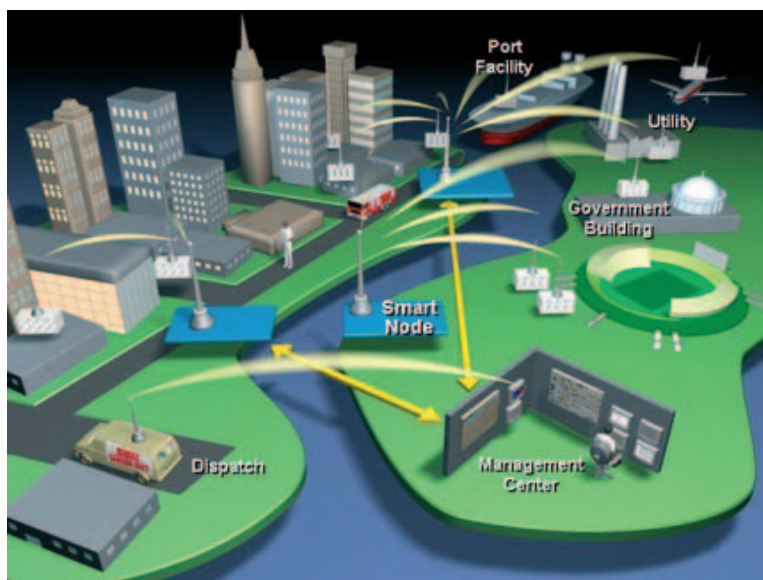
Features

- Unattended gamma radiation monitor – originally designed to monitor nuclear power plant perimeters

- Configurable with a variety of sensors for Environmental and Homeland Security applications

- Range: 0 to 10R/hr (0 to 100mSv/hr)

- Accuracy: +/-5% at 10microR/hr

- Configurable alarm set points

- 20,000 data point storage – interval configurable

- Replaces all earlier models including RSS 1012 and RSS 1013

Contact

Contact your GE Energy representative today for complete product specifications and ordering information at 330-963-2448 or rsweb@ps.ge.com.

RSS 131

Specifications

Gamma Measurement
- 0 to 10R/hr (0 to 100mSv/hr)
- Accuracy +/-5% at 10microR/hr
- Zero <+/-0.5 microR/hr
- Gain <+/-1% of reading
- Angular dependence: <2% over all angles
- Sample Rate: 1 second
- Operating temperature: -25C to +55C

Auxiliary Measurements
- Sensor temperature
- Battery voltage
- High voltage bias

Data Storage
- Data recording interval – adjustable 1 second to 9 hours
- Data capacity – 20,000 data points
- Maximum archive time – 5.5 hours to 20.5 years

Real-time clock
- Drift <2 minutes/month

Power
- 6 volt internal battery (optional)
- Operating current 220mA
- External battery charger (optional)
- Solar power (optional)

Serial Transmission
- Three RS-232 ports
- Dial-up modem (optional)
- Compatible with many externally mounted wireless radio options

Mechanical
- 12"X12"X14" overall (31cm x 31cm x 36cm)
- 33 lbs (15 kg)
- Weatherproof enclosure: Aluminum with two-part catalytic polyurethane paint
- Latches and hardware: stainless steel

Other Options
- Tripod
- Configuration utility
- Central processing software
- Rain gauge
- Barometric pressure
- Wind speed and direction