

GE Energy

## Reuter-Stokes 131 Environmental Radiation Monitor

### Benefits

- Able to identify increases above background radiation levels not detectable with GM technologies
- Omni-directional – spherical HPIC is not subject to inherent GM tube limitations
- Reliable operation in extreme climates
- Many units in service over 20 years
- Simplified repair and maintenance

### Solid Performance

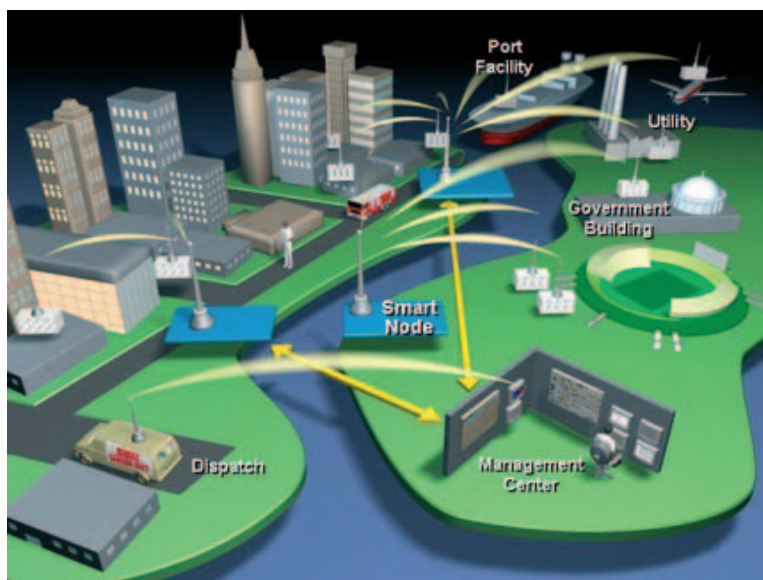
Designed to measure low-level airborne gamma radiation, this Environmental Radiation Monitor (RSS 131) is the latest High Pressure Ionization Chamber (HPIC) from GE Energy. With over 30 years of service in multiple utility and environmental radiation monitoring applications around the world, Reuter-Stokes 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](mailto:rsweb@ps.ge.com).

©2004, General Electric Company. All rights reserved. The contents of this document are the property of General Electric Company. No part of this work may be reproduced or transmitted in any form or by any means, except as permitted in written license agreement with General Electric Company. General Electric Company has made every reasonable attempt to ensure the completeness and accuracy of this document. However, the information contained in this document is subject to change without notice, and does not represent a commitment on the part of General Electric Company. The GE logo is a registered trademark of General Electric Company.

## 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

