

## OI-9850

The Otis Instruments OI-9850 Interface WireFree Interface is a high-capacity gateway designed to interface with up to 255 WireFree detectors, converting wireless data into standard industrial communication protocols for seamless system integration.

### Key Features:

- **High-Capacity Monitoring:** Supports up to 255 WireFree detectors
- **Flexible Communications:** Outputs include RS-232/RS-485 Modbus
- **System Integration:** Compatible with PLCs, SCADA systems, DCS and computers
- **Optional Analog Output:** 4–20 mA output for up to 32 sensors with optional analog cards

### Applications:

- Industrial automation
- Environmental monitoring
- Large-scale gas detection networks
- PLC and SCADA-based systems

The OI-9850 delivers reliable, scalable connectivity, enabling efficient data integration and enhanced safety monitoring across industrial operations.



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# WireFree Interface Controller

## Product Specifications

Product Type	WireFree Interface with up to 255 Detectors
Power Operating Voltage	12V to 35V DC
Current Draw	800 mA Maximum at 24 VDC
Power Supply	Unit comes standard AC power, 3.13A (75W), 85/264V AC to 24V DC (Optional)
Antenna Connection	External N-Female Radio Frequency (RF) Connector
Protection	Power Electromagnetic Interference (EMI) Filter 4-20 mA Surge Suppression RS-485 Surge Suppression
Display Screen	128 x 64 Resolution Graphical LCD Screen Transflective (Sunlight Readable) with LED Backlight
Interface	4 Push-Buttons (MENU, ADD, SUB and RESET/ESC)
T <sub>amb</sub> Temperature Range	-40°C to +70°C
WireFree (Digital) Input	Up to 255 WireFree Sensors
Wired (Analog) Output	Up to 32 Wired 4-20 mA (3-Wire) Analog Sensor Outputs (optional and sold separately) Fault Terminal
Digital Output	RS-232 and RS-485 Modbus
Product Compatibility	All Otis GEN II WireFree Products and Any Wired 4-20 mA Sensors
WireFree Radio Options	GEN II 900 MHz Radio GEN II 2.4 GHz Radio
Networks	52 Networks (GEN II 900 MHz Radio) 78 Networks (GEN II 2.4 GHz Radio) 255 Addresses per Network
Enclosure Material	Fiberglass Enclosure w/ Clear Window
Product Dimensions	6.5" D x 10" W x 21" H (Max. Dimensions w/ Attachments)
Total Weight	8.90 lbs.
Product Add-On Hardware	OI-4200-PCA, 8 Channel 4-20 mA Output Add-On Board Capacity: 4 Maximum per OI-9850
Product Mounting	4 Mounting Feet, 6 in. W x 12-1/4 in. T (Included) Maximum Mounting Bolt/Screw Size of 5/16 in. (8mm) Diameter
Hardware Warranty	Limited one year
Part Number Formula	OI-9850-[Power]-[Radio]-A4-[Add on 4-20 mA boards] OI-9850-AC-9-A4-32-4