HONEYWELL
CENTRAL HUB

Universal Connectivity Gateway

Collecting the gas sensor data of the wireless instrument and reporting to the platform in real time.

The Central Hub utilizes Long Range Low Power (LoRa) radio that collects the gas sensor data from Honeywell gas detectors and reports it in real-time to the Honeywell Safety Suite software solution. The Hub supports three uplink connection methods: Ethernet, Wi-Fi and Cellular.

- Supports GPS positioning and regularly report device location information
- Supports multi-channel LoRa enabled gas detectors
- Multiple indicators show the working status of the equipment
- Aids wall-mounted, desktop, and car installation

FEATURES AND BENEFITS

Supports three uplink connection methods, Ethernet, Wi-Fi & Cellular

Supports up to 64 LoRa enabled gas detectors per Central Hub

Operates in real time to provide data analytics through Safety Suite software

Allow multiple Central Hubs to to work together for wide area coverage

Honeywell

Honeywell Central Hub Technical Specifications

TABLE 1. HARDWARE SPECIFICATIONS		
SPECIFICATIONS	**DESCRIPTION**	**REMARKS**
Core	ARM 4-core processor; 2 GB RAM; 8 GB Flash Ubuntu OS, Python	
Power supply	DC power supply, 12 V ~ 24 V, 500 mA or USB Type C input: 5 V, 2 A	
Power consumption	6 W	
LoRa	868/915 MHz band & 470 MHz band Honeywell Proprietary LoRa network	Downlink to gas detectors
Ethernet	10/100M adaptive	RJ45, uplink
4G	LTE FDD, CAT/4	Uplink
Wi-Fi	802.11 g/n 2.4 GHZ	Uplink
Bluetooth*	BT/BLE 5.0	Reserved
GPS/BD	GPS L1 C/A, -163 dBm tracking sensitivity	Support active antenna
Storage memory	Micro-SD card, 32 GB memory	
USB	USB TypeC	
NFC reader	13.56 MHz	Buzzer ack, reserved
SIM cellular	1.8 V/3.0 V, plug-in card	
Key/button	Power button; reset button	Power button:On/Off Reset button: Hot reset
LED	Status indication	Power LED: Green RF LED: LoRa activity, Green LAN LED: Green Wi-Fi LED: Green LTE LED: Green Fault LED: Red, unit fault
Working temperature	-4°F to 140°F (-20°C to 60°C)	
Storage temperature	-40°F to 140°F (-40°C to 60°C)	
Enclosure	IP30	
Size	194 mm x 131 mm x 44,5 mm 950 g device, 1.7 kg with package 7.64" x 5.16" x 1.75" 2.1lbs device, 3.27lbs with package	
LoRa range	Up to 0.62 mile/1 km (gas detectors) Up to 64 per Central Hub	

* Bluetooth is a trademark of Bluetooth Special Interest Group (SIG)

Honeywell Central Hub Technical Specifications

TABLE 2. SOFTWARE SPECIFICATIONS

SPECIFICATIONS	DESCRIPTION	REMARKS
User interface	Embedded web server, show the Central Hub's status; configure its parameters	
Log (SD card)	Record the device working log, FDD dial-in log, error log	Easy to check and helps manage device maintenance
Firmware update	Update the Central Hub firmware through web browser interface	
Reset	Hot reset, web browser interface command reset	

TABLE 3. ENVIRONMENTAL COMPLIANCE

RoHs3
REACH
US California Proposition 65
TSCA PBT Substances

TABLE 4. CERTIFICATIONS

Certification: RE-D for EU
FCC & IC for North America
Mobile Network Operator Approvals for 4G module
Safety UL/EN60950-1 for AC adaptor
Compliance: ROHS/REACH /Prop65 compliance

CENTRAL HUB | PLANT

Existing Solution

MultiRAE
- **Wireless connectivity** – Mesh (0.5 km – 0.3 mile)
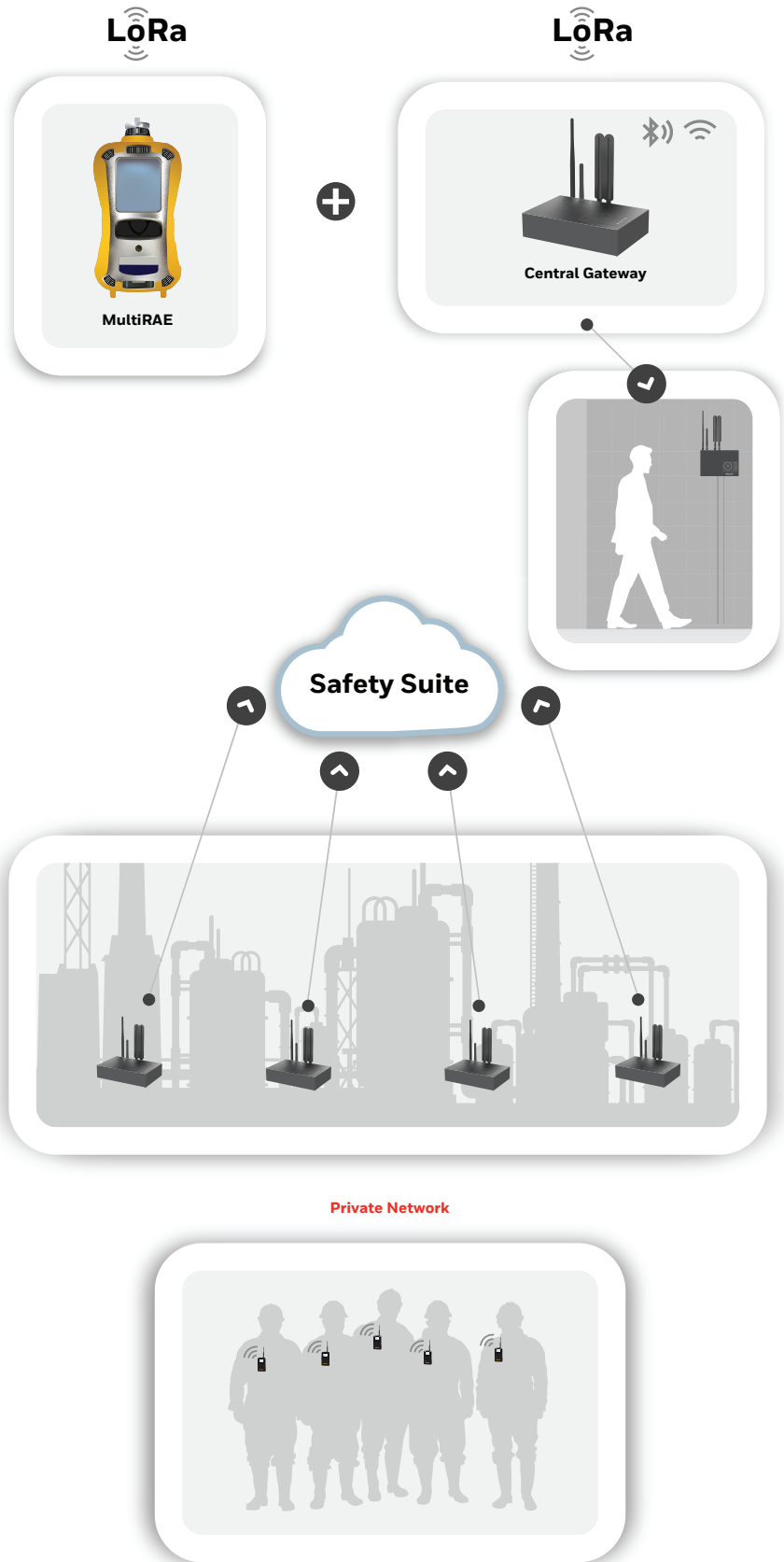- **Man down** – Gyroscope/Accelerometer

New Solution

MultiRAE
- **Wireless connectivity** – LoRa (1 km – 0.6 mile)
- **Certification** - RE-D, FCC/IC

Central Gateway
- **Wireless connectivity** - LoRa
- **Wired uplink** - Ethernet Port/Wi-Fi
- **Additional connectivity** – USB-C/BLE
- **Device identification** – RFID/NFC reader
- **Local storage** – Data storage & forward; firmware update; configuration update

LoRa

LoRa

MultiRAE

Central Gateway

Safety Suite

Private Network

CENTRAL HUB | REMOTE

Existing Solution

MultiRAE

- **Wireless connectivity** – Mesh (0.5 km – 0.3 mile)
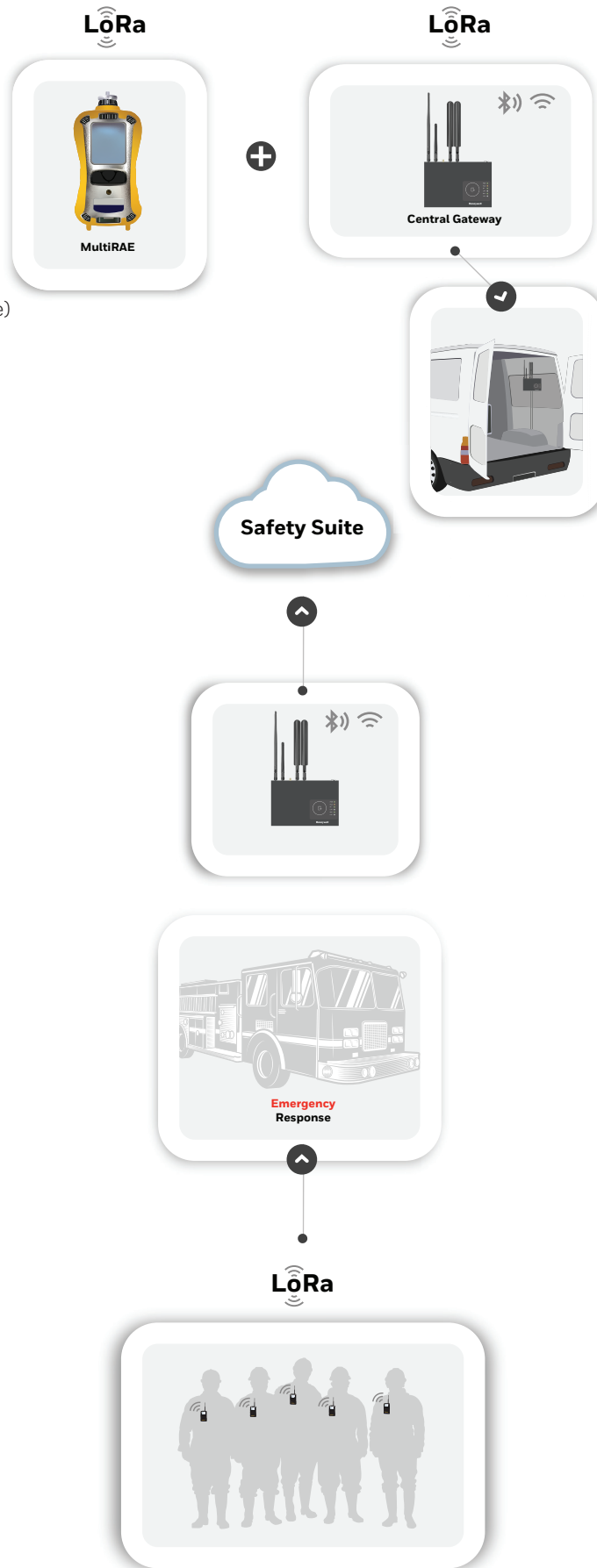- **Man down** – Gyroscope/Accelerometer

New Solution

MultiRAE

- **Wireless connectivity** – LoRa (1 km – 0.6 mile)
- **Certification** - RE-D, FCC/IC

Central Gateway

- **Wireless connectivity** - LoRa
- **Wired uplink** - Cellular/Wi-Fi
- **Additional connectivity** – USB-C/BLE
- **Device identification** – RFID/NFC reader
- **Local storage** – Data storage & forward; firmware update; configuration update

LoRa

LoRa

MultiRAE

Central Gateway

Safety Suite

Emergency Response

LoRa

CENTRAL HUB | AREA MONITORING

Existing Solution

AreaRAE, RigRat & Meshguard
- **Wireless connectivity** – ISM(1.5 km – 0.9 mile)/Mesh (0.5 km – 0.3 mile)
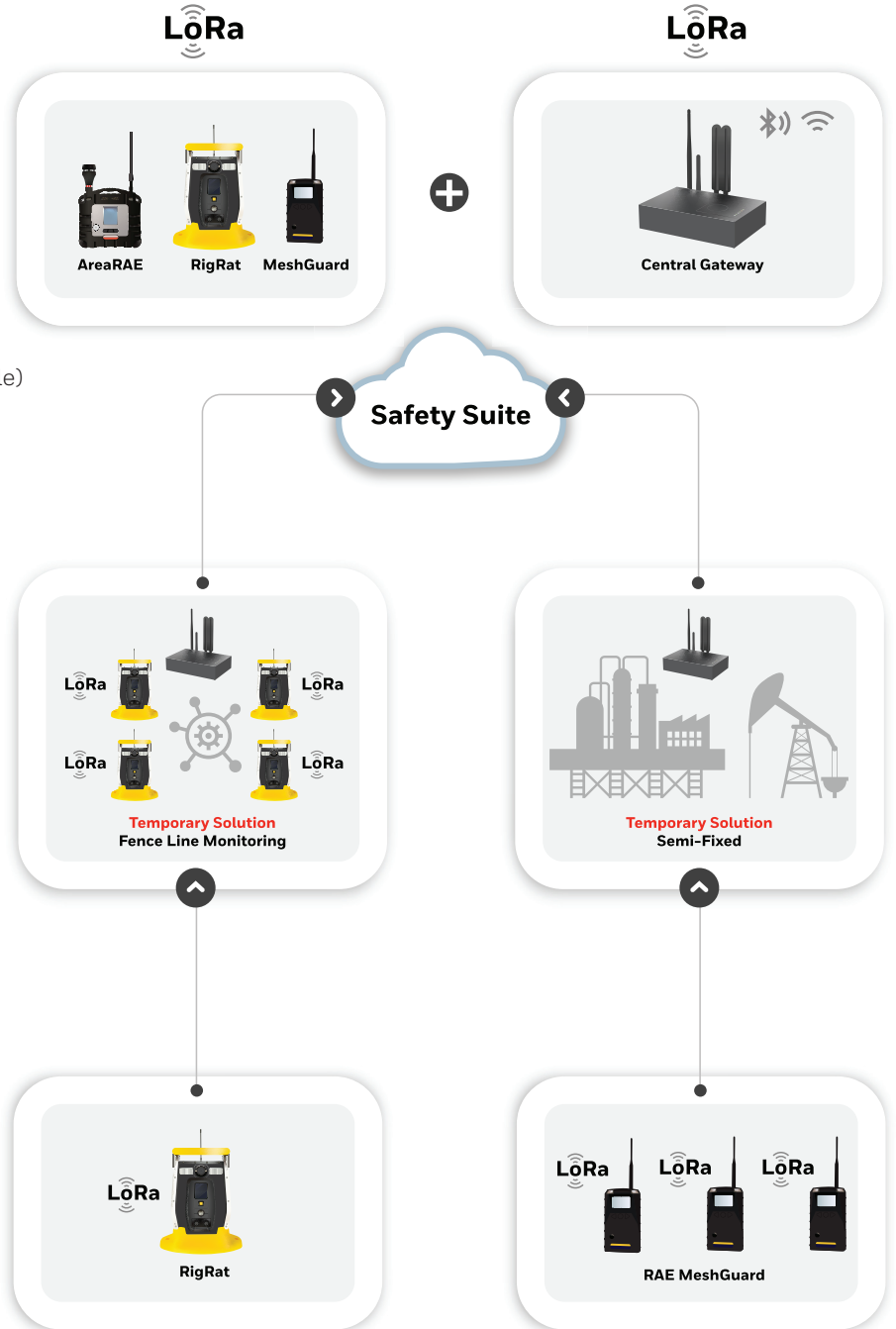- **Man down** – Gyroscope/Accelerometer

New Solution

AreaRAE, RigRat & Meshguard
- **Wireless connectivity** – LoRa (1 km – 0.6 mile)
- **Certification** - RE-D, FCC/IC

Central Gateway
- **Wireless connectivity** - LoRa
- **Wired uplink** - Cellular/Wi-Fi
- **Additional connectivity** – USB-C/BLE
- **Device identification** – RFID/NFC reader
- **Local storage** – Data storage & forward; firmware update; configuration update

LoRa

AreaRAE   RigRat   MeshGuard

LoRa

Central Gateway

Safety Suite

LoRa LoRa LoRa LoRa

Temporary Solution
Fence Line Monitoring

Temporary Solution
Semi-Fixed

LoRa

RigRat

LoRa LoRa LoRa

RAE MeshGuard

For more information

sps.honeywell.com

Honeywell Sensing and Safety Technologies

855 South Mint Street
Charlotte, NC 28202
(803) 835-8000

Contact us

US:	Canada:
Tel. 800.430.5490	Tel. 888.212.7233
Fax. 800.322.1330	Fax. 888.667.8477

informationsp@honeywell.com

**THE
FUTURE
IS
WHAT
WE
MAKE IT**
—

Honeywell