# DETECT, MAP, AVOID

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### Honeywell's IntuVue RDR-84K Band Radar is the ultimate all-purpose sensing system for urban air mobility and unmanned aerial systems.

The aerospace industry needs powerful and reliable radar technologies that can deliver high-performance and efficient results even in very challenging conditions. Meet Honeywell's IntuVue RDR-84K radar system – the new detect-and-avoid sensing system for drones and urban air mobility (UAM) vehicles.

IntuVue RDR-84K uses multiple beams to identify more things simultaneously, enabling it to image other aircraft, ground vehicles, buildings and even people up to three kilometers away. And benefits don't stop here. The RDR-84K is lightweight, weighing only 1.5 pounds (0.7 kilograms), and can be mounted on a wide range of aircraft and autonomous aerial vehicles.

#### LOW POWER CONSUMPTION, HIGH DETECTION CAPABILITIES

IntuVue RDR-84K needs only 60 watts of power to operate and requires no cooling systems, making it ideal for a large variety of platforms. Its 24 GHz phased array offers superior resolution when compared to other airborne radars – detecting other air traffic in the most demanding environments.

The RDR-84K has the widest range detection parameters available today, delivering safer and more efficient object scanning and terrain mapping. Its advanced object discrimination amplifies the detect-and-avoid capabilities. Through a multitude of scans, it can image more things simultaneously, offering a 360-degree view of the world.

#### EASY TO OPERATE, TOUGH TO BEAT

The RDR-84K interfaces seamlessly with inertial measurement units and other sensors to provide alternate navigation if primary guidance fails. It can assist in landing zone alignment and operate as a radar altimeter enabling accurate, automated landings.

Taking radar imaging a step further, the RDR-84K is equipped with monopulse technology – an advanced digital processing technique that sharpens the radar beam. Using monopulse beam-sharpening radar, image resolution is improved, ultimately resulting in higher-fidelity imaging and improved targeting capability.

The RDR-84K saves weight and space by replacing other sensors and, unlike other radars, it's fully software configurable. The RDR-84K has already flown hundreds of hours on UAM vehicles, NASA drones and traditional aircraft.

#### For more information

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#### **MAIN BENEFITS:**

- Very small in size and lightweight
- Can install multiple units on a single aircraft
- Networked units work together to provide a 360-degree view of the world
- Able to detect multiple objects simultaneously
- Can replace other sensors on an autonomous platform
- Ideal for a broad variety of industries.
  - Helicopters
  - UAM and Unmanned Aerial Vehicles and
  - Autonomous military ground vehicles.

#### **KEY CHARACTERISTICS**

Weight: 1.5 lbs. (0.7 kg) Size: 8.9" x 4.9" x 1.7" (226 mm x 125 mm x 43 mm)

Power: 60 watts

Field of view: 110 azimuth x 30° elevation

Packaging: RF and processing in one box



