

ePix Ltd. Power-Ranger

The Power-Ranger is a battery free pocket size UHF RFID power indicator.

What can it do:

- Detects which antenna is transmitting. System testing.
- Range at 2W ERP (3.28W EIRP) is 3 metres in free space.
- Shows approximate RADIATED POWER. ERP, E_iRP
- Tests polarisation of antennas. Linear, circular and cross polarised
- Test approximate beam angle of antennas.
- Pulses to show notify time and other transmit interruptions.
- Find antenna sweet spot for Programming etc.
- Detects multiplexing.

Features Benefits.

- Rugged construction.
- No Battery (lasts a lifetime)
- Pocket size
- Simple to use
- Gen 2 tested, works with all readers.
- Detect cable Faults and bad connections.

Specification:

- Frequency range 820MHz to 950 MHz
- Tested with Dipole, linear, circular patch and cross polarised antennas
- Tested for use to EN302 208 at 865MHz to 868MHz
- Tested with US 915 MHz readers
- Power reading range 100mW to 8W+ ERP
- Battery Life, Infinite. (runs on transmitter RF power)
- CE marked. EN90650 compliant. No Lead etc.
- The Power-Ranger contains banned substances, RoHs compliant
- The Power-Ranger does not radiate any RF signals.
- Height 85.4mm, Width 24mm, Depth 19mm



Basic instructions:

Hold the Power-Ranger body between your finger and thumb; do not hold the antenna. Move the Power-Ranger slowly away from the centre of the antenna until the LED fades out completely. Moving the Power-Ranger in small circles will improve the reading accuracy. Measure the distance between the antenna and Power ranger to estimate the TX power @ 3 meters = about 2W ERP (4W EIRP). Each reduction in range of 25% represents a -3dB decrease in power.

Polarisation can be detected by simply turning the Power-Ranger 90 Degrees.

Moving the Power-Ranger from side to side until the light extinguishes; this will show the approximate radiation beam angle of the antenna.

Moving the Power Ranger from side to side very quickly, close to the antenna, will show the transmitter mark to space ratio (on-off ratio) to indicate antenna multiplexing.

Consider leaving a Power-Ranger at every RFID Installation site, for simple system checking by onsite site staff. (Your company logo can be used to replace the ePix logo.)

Safety Regulations state that you should not work within 25cm of a 2W ERP 4W EIRP transmission for long periods.

The Power Ranger can be returned to ePix Ltd for disposal or use standard disposal for electrical equipment.