



## **Certification Exhibit**

**FCC ID: SK9OW1**

**FCC Rule Part: 47 CFR Part 2.1091**

**Project Number: 72187413**

Manufacturer: Itron, Inc

Model Name: OW1

## **RF Exposure**

**General Information:**

Applicant: Itron, Inc.  
Device Category: Mobile  
Environment: General Population/Uncontrolled Exposure

**Technical Information:**

Detail	Description
Frequency Range	902.4 – 927.6 MHz
Modulation Format	FSK, OFDM, DSSS
Data rates (kbps)	FSK: 50, 150 OFDM: 200, 600 DSSS: 6.25, 12.5
Number of Channels	64
Channel Spacing	400kHz
Antenna Type / Description:	Monopole Cisco Antenna ANT-5G-MP-OUT-N / 2 dBi

Note: Only the technical parameters listed above, from the original certification, were evaluated for the additional antenna. The device is capable of additional modes / frequency bands, as defined in subsequent permissive change applications, which are not valid for use with the antenna detailed above.

Maximum Transmitter Conducted Power: \*29.54dBm, 899.50mW

Maximum System EIRP: 31.54dBm, 1425.61mW

Exposure Conditions: 20 centimeters

**RF Exposure Calculation**

**Table 1: Device Characteristics**

Technical Parameters	900 MHz radio
Frequency (MHz)	915.2
Separation Distance (cm)	20.0
Separation Distance (m)	0.20
Antenna Gain (dBi)	2.0
ERP Easily Determined	YES
Conducted Power (dBm)	29.54
Conducted Power (mW)	899.50
Duty Factor (Source-Based) %	100.0
Maximum (Source-Based) Time-Averaged Conducted Power (mW)	899.50
Maximum (Source-Based) Time-Averaged ERP (mW)	869.27
Maximum (Source-Based) Time-Averaged EIRP (mW)	1425.61
Maximum Output (mW)	899.50

**Test Exemption Criteria**

Test exemption is determined by 47 CFR 1.1307(b)(3)(i)(B) where single RF source is exempt if:

The available maximum time-averaged power or effective radiated power (ERP), whichever is greater, is less than or equal to the threshold P<sub>th</sub> (mW) described in the following formula. P<sub>th</sub> is given by:

$$P_{th} \text{ (mW)} = \begin{cases} ERP_{20 \text{ cm}} (d/20 \text{ cm})^x & d \leq 20 \text{ cm} \\ ERP_{20 \text{ cm}} & 20 \text{ cm} < d \leq 40 \text{ cm} \end{cases}$$

Where

$$x = -\log_{10} \left( \frac{60}{ERP_{20 \text{ cm}} \sqrt{f}} \right) \text{ and } f \text{ is in GHz;}$$

and

$$ERP_{20 \text{ cm}} \text{ (mW)} = \begin{cases} 2040f & 0.3 \text{ GHz} \leq f < 1.5 \text{ GHz} \\ 3060 & 1.5 \text{ GHz} \leq f \leq 6 \text{ GHz} \end{cases}$$

d = the separation distance (cm);

**Table 2: 47 CFR 1.1307(b)(3)(i)(B) SAR – Based Exemption Pth (mW)**

<b>Technical Parameters</b>	<b>900 MHz radio</b>
x	1.47
ERP <sub>20cm</sub> (mW)	1867.01
Maximum Output (mW)	899.498
P <sub>th</sub> (mW)	1867.008
Exemption	<b>YES</b>