



MPE/RF EXPOSURE EVALUATION REPORT

FCC CFR 47 Part 1.1310

Report No.: ITRO67-U29B Rev A

Company: Itron, Inc

Model Name: ERG-7600-005

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Model Name: ERG-7600-005

To: FCC CFR 47 Part 1.1310

Test Report Serial No.: ITRO67-U29B Rev A

This report supersedes: NONE

Applicant: Itron, Inc
2401 North State St.
Waseca, Minnesota 56093
USA

Issue Date: 21st August 2024

This Test Report is Issued Under the Authority of:

MiCOM Labs, Inc.
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TESTING CERT #2381.01

MiCOM Labs is an ISO 17025 Accredited Testing Laboratory

1. MAXIMUM PERMISSABLE EXPOSURE

Calculations for Maximum Permissible Exposure Levels

$$\text{Power Density} = P_d (\text{mW/cm}^2) = \text{EIRP} / (4 * \pi * d^2)$$

$$\text{EIRP} = P * G$$

P = Peak output power (mW)

G = Antenna numeric gain (numeric)

d = Separation distance (cm)

$$\text{Numeric Gain} = 10 ^ { (G (\text{dBi}) / 10)}$$

The calculations in the table below use the highest conducted power values together with the highest antenna gain specified for the EUT. These calculations represent worst case in terms of the exposure levels.

Band	Freq (MHz)	Ant Gain (dBi)	Numeric Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Calculated Power Density (mW/cm ²) @ 20cm	Power Density Limit (mW/cm ²)	Min Calculated safe distance for Limit (cm)	RATIO Power Density/ Limit
902.0 - 928.0	902.0	2.23	1.67	25.11	324.34	0.108	0.60	8.46	0.179

Note: for mobile or fixed location transmitters the minimum separation distance is 20cm, even if calculations indicate the MPE distance to be less.

SUMMARY; Minimum safe distance to meet the RF exposure requirements = 20cm

Specification - Maximum Permissible Exposure Limits

The Limits are defined in Table 1 of FCC §1.1310.

The Limits for General Population/Uncontrolled Exposure apply to the ERG-7600 due to its intended use.

Table 1 to [§ 1.1310\(e\)\(1\)](#)—Limits for Maximum Permissible Exposure (MPE)

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm ²)	Averaging time (minutes)
(ii) Limits for General Population/Uncontrolled Exposure				
0.3-1.34	614	1.63	*(100)	<30
1.34-30	824/f	2.19/f	*(180/f ²)	<30
30-300	27.5	0.073	0.2	<30
300-1,500			f/1500	<30
1,500-100,000			1.0	<30

The Itron ERG-7600-005 is also marketed as the following Model Numbers per Manufacturer Declaration of Similarity (refer to Section 2 of this report).

ERG-7600-006

ERG-7600-010

2. Manufacturer Declaration of Similarity



July 31, 2024

Itron, Inc.
2401 N. State St.
Waseca, MN 56093
507-781-4300
www.itron.com

Subject: Declaration of Similarity:
FCC ID: EWQ500GTB,
ISED ID: 864D-500GTB

Dear Sir or Madam,

We declare the product models listed below are electrically identical.

Product Information	
Marketing Name(s)	500G ERT Module
Description	Utility AMR device
Models(s)	ERG-7600-005, ERG-7600-006, ERG-7600-010

The only difference between these variant models is the housing and the gas meter wriggler interface. The differences of these variants does not affect any RF or EMC performance.

Sincerely,

A handwritten signature in black ink, appearing to read 'Dan Bomsta'.

Dan Bomsta
Sr. Principal Regulatory Engineer
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Itron, Inc.



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