



Test report

Number T251-0859/22 **Project file:** C20212917
Date: 2022-11-15
Pages: 5

Product: Vending Telemetry Apparatus

Type reference: TE36

Ratings: 18 – 30 Vac or 15 - 42 Vdc
Protection class: III

Trademark: TELEVEND

Applicant: INTIS Ltd. for trading engineering and services
Bani 73a, HR-10010 Zagreb, Croatia

Manufacturer: INTIS Ltd. for trading engineering and services
Bani 73a, HR-10010 Zagreb, Croatia

Place of manufacture: INTIS Ltd. for trading engineering and services
Bani 73a, HR-10010 Zagreb, Croatia

Summary of testing

Testing method: 47 CFR FCC Part 1.1307(clause (b)(1)(i)(B) and (b)(3)(ii)(B)),
KDB 447498 D01 General RF Exposure Guidance v06

Testing location: SIQ Ljubljana
Mašera-Spasićeva ulica 10, SI-1000 Ljubljana, Slovenia

Remarks: Date of receipt of test items: 2022-09-02
Number of items tested: 1
Date of performance of tests: 2022-11-15
The test results presented in this report relate only to the items tested.
The product complies with the requirements of the testing methods.

Tested by: Luka Tosetto

Approved by: Marjan Mak

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1 GENERAL

| History sheet | | | |
|---------------|--------------|-----------------------------|----------|
| Date | Report No. | Change | Revision |
| 2023-01-20 | T251-0859/22 | Initial Test Report issued. | -- |

1.1 Equipment under test

Vending Telemetry Apparatus

Type: **TE36**

Environment: Uncontrolled / General Public

Assessment distance: ≥ 20 cm

FCC ID: **2A8XO-TE36Y2209**

Contains FCC ID: **2AJYU-8PYA007**

Reviewed test report T251-0721/22 from SIQ Ljubljana.



2 ASSESSMENT PROCEDURE

MPE EVALUATION OF FIXED DEVICES

According to 47 CFR 1.1307 clause (b)(1)(i)(B):

With respect to the limits on human exposure to RF provided in § 1.1310 of this chapter, applicants to the Commission for the grant or modification of construction permits, licenses or renewals thereof, temporary authorities, equipment authorizations, or any other authorizations for radiofrequency sources must prepare an evaluation of the human exposure to RF radiation pursuant to § 1.1310 and include in the application a statement confirming compliance with the limits in § 1.1310.

Limits:

TABLE 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) |
|---|-------------------------------|-------------------------------|-------------------------------------|--------------------------|
| (A) Limits for Occupational/Controlled Exposure | | | | |
| 0.3-3.0 | 614 | 1.63 | * 100 | 6 |
| 3.0-30 | 1842/f | 4.89/f | * 900/f ² | 6 |
| 30-300 | 61.4 | 0.163 | 1.0 | 6 |
| 300-1,500 | | | f/300 | 6 |
| 1,500-100,000 | | | 5 | 6 |
| (B) 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 |

Calculation:

$$P_d = \frac{P_t}{4 * \pi * R^2}$$

Where:

P_d= Power density in mW/cm²

P_t = EIRP in mW

π = 3.14

R = Evaluation distance

According to 47 CFR 1.1307 clause (b)(3)(ii)(B):

(ii) For multiple RF sources: Multiple RF sources are exempt if:

(B) in the case of fixed RF sources operating in the same time-averaging period, or of multiple mobile or portable RF sources within a device operating in the same time averaging period, if the sum of the fractional contributions to the applicable thresholds is less than or equal to 1 as indicated in the following equation.

3 MEASUREMENTS / CALCULATIONS

Values for each configuration are listed in the following table:

| Frequency (MHz) | Maximum* Power with antenna gain and tune-up (dBm) | Maximum* Power with antenna gain and tune-up (mW) | Power Density (mW/cm ²) | Limit (mW/cm ²) |
|-----------------|--|---|-------------------------------------|-----------------------------|
| 2402 | 4.7 | 2.95 | 0.0009355 | 1 |
| 2440 | 4.7 | 2.95 | 0.0009355 | 1 |
| 2480 | 4.3 | 2.69 | 0.0008560 | 1 |

* Gated power with Duty Cycle calculated in

** maximum tolerance provided from manufacturer is ± 2 dB.

Conclusion: **PASS**