



849 NW STATE ROAD 45
NEWBERRY, FL 32669 USA
PH: 888.472.2424 OR
352.472.5500
FAX: 352.472.2030
EMAIL: INFO@TIMCOENGR.COM
[HTTP://WWW.TIMCOENGR.COM](http://WWW.TIMCOENGR.COM)

RF Exposure Evaluation Report

| | |
|----------------------------|---|
| APPLICANT | FIPLEX COMMUNICATIONS INC. |
| | 2101 NW 79th Ave. MIAMI FL 33122 USA |
| FCC ID | P3TDH437-R |
| MODEL NUMBER | DH437-R-DU |
| PRODUCT DESCRIPTION | UHF DIGITAL REMOTE UNIT |
| STANDARD APPLIED | CFR 47 Part 2.1091 |
| PREPARED BY | Franklin Rose |

We, TIMCO ENGINEERING, INC. would like to declare that the device has been evaluated in accordance with 47 CFR Part 2.1091 and meets the requirements.

The attached report shall not be reproduced except in full without the written approval of TIMCO ENGINEERING, INC.

GENERAL REMARKS

Attestations

This equipment has been evaluated in accordance with the standards identified in this report. To the best of my knowledge and belief, these evaluations were performed using the procedures described in this report.

I attest that the necessary evaluations were made, under my supervision, at:

Timco Engineering Inc.
849 NW State Road 45
Newberry, FL 32669

Authorized Signatory Name:



Franklin Rose, Engineering Project Manager

Date: 02/27/2018

RF Exposure Requirements

General information

Device type: UHF DIGITAL REMOTE UNIT

Antenna

The manufacturer does not specify an antenna, but a typical antenna has a gain of 0 dBi.

| Configuration | Antenna p/n | Type | Max. Gain (dBi) |
|---------------|-------------|------|-----------------|
| Fixed mounted | Any | omni | 0 |
| | | | |

Operating configuration and exposure conditions:

The conducted output power is shown in the table below. Typical use qualifies for a maximum duty cycle factor of 100%.

MPE Calculation:

The minimum separation distance is calculated as follows:

$$E(V/m) = \frac{\sqrt{30 \times P \times G}}{d}$$

$$\text{Power density: } P_d(mW/cm^2) = \frac{E^2}{3770}$$

The limit for general uncontrolled exposure environment is shown in FCC rule Part 1.1310, Table 1.

| Minimum Separation Distance for Mobile or Fixed Devices General Population/Uncontrolled Exposure | | | | | | |
|---|-------------|--------------------|---------------|--------------------------------------|--------------------|--------------------|
| Insert values in yellow highlighted boxes to determine Minimum Separation Distance | | | | | | |
| Max Power | 4.55 | W | <i>equals</i> | Max Power | 4550 | mW |
| Duty Cycle | 100 | % | <i>equals</i> | Duty Factor | 1 | numeric |
| Antenna Gain | 0 | dBi | <i>equals</i> | Gain numeric | 1 | numeric |
| Coax Loss | 0 | dB | | Gain - Coax Loss | 1 | numeric |
| Power Density | 0.3 | mW/cm ² | | | | |
| Enter power Density from the chart to the right | | | | Rule Part 1.1310, Table 1 (B) | | |
| Frequency | 485 | MHz | | Frequency range | Power density | Enter this value |
| | | | | MHz | mW/cm ² | mW/cm ² |
| | | | | 0.3-1.34 | 100 | 100 |
| | | | | 1.34-30 | 180/f ² | 0.0 |
| | | | | 30-300 | 0.2 | 0.2 |
| | | | | 300-1,500 | f/1500 | 0.3 |
| | | | | 1,500-100,000 | 1 | 1 |
| | | | | f = frequency in MHz | | |
| Minimum Separation Distance | 34.74083 cm | | | | | |
| Minimum Separation Distance | | | | 35 | cm | 0.35 m |