



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	P3TDHS37-R-DU
MODEL NUMBER	DHS37-R-DU
PRODUCT DESCRIPTION	800 BAND 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




A handwritten signature in blue ink is placed over a red circular company seal. The seal contains the text 'TIMCO ENGINEERING INC.' around the perimeter and 'FL' in the center.

Authorized Signatory Name:

Franklin Rose, Engineering Project Manager

Date: 2/27/2018

Applicant: FIPLEX COMMUNICATIONS INC.
FCC ID: P3TDHS37-R-DU
Report: 208AUT18RF EXP MPE RPT

RF Exposure Requirements

General information

Device type: 800 Band 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:

$E(V/m) = \frac{\sqrt{30 \times P \times G}}{d}$	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	4.91	W	equals	Max Power	4910	mW																							
Duty Cycle	100	%	equals	Duty Factor	1	numeric																							
Antenna Gain	0	dBi	equals	Gain numeric	1	numeric																							
Coax Loss	0	dB		Gain - Coax Los	1	numeric																							
Power Density	0.6	mW/cm ²																											
Enter power Density from the chart to the right																													
Frequency	869	MHz		Rule Part 1.1310, Table 1 (B) <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Frequency range</th><th style="text-align: center;">Power density</th><th style="text-align: center;">Enter this value</th></tr> <tr> <th style="text-align: center;">MHz</th><th style="text-align: center;">mW/cm²</th><th style="text-align: center;">mW/cm²</th></tr> </thead> <tbody> <tr> <td style="text-align: center;">0.3-1.34</td><td style="text-align: center;">100</td><td style="text-align: center;">100</td></tr> <tr> <td style="text-align: center;">1.34-30</td><td style="text-align: center;">180/f²</td><td style="text-align: center;">0.0</td></tr> <tr> <td style="text-align: center;">30-300</td><td style="text-align: center;">0.2</td><td style="text-align: center;">0.2</td></tr> <tr> <td style="text-align: center;">300-1,500</td><td style="text-align: center;">f/1500</td><td style="text-align: center;">0.6</td></tr> <tr> <td style="text-align: center;">1,500-100,000</td><td style="text-align: center;">1</td><td style="text-align: center;">1</td></tr> </tbody> </table> <p style="text-align: center;">f = frequency in MHz</p>					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	0.6	1,500-100,000	1	1
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	0.6																											
1,500-100,000	1	1																											
Minimum Separation Distance	25.5188 cm																												
Minimum Separation Distance			26	cm	0.26	m																							