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RF Exposure Evaluation Report

APPLI CANT	FIPLEX COMMUNICATIONS INC.
	2101 NW 79th Ave. MIAMI FL 33122 USA
FCC I D	P3TDHS37-R-DU
MODEL NUMBER	DHS37-R-DU
PRODUCT DESCRI PTI ON	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



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

<u>Antenna</u>

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	om ni	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%.

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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	Senaratio	on Distanc	ce for Mobile or I	Fixed Devi	res	
		•		Incontrolled Exp		ces	
		•					
Insert values	in yellow	highlighte	d boxes to	o determine Min	imum Sep	aration Distan	ce
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					\vdash
Enter power Density from the chart to the right		Rule Part 1.1310, Table 1 (B)					
Frequency	Frequency 869 MHz			Frequency rang	Power de	Enter this valu	e
				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	
				f = frequency in	n MHz		
Minimum Separation	Distance	25.5188	cm				
Minimum Separation Distance		26	cm	0.26	m		
willing 3charation pistance		20	cm	0.20	111		

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