





RF EXPOSURE REPORT

Product: Out Door Unit

Model Name: CPE12000U PRO

FCC ID: ARA-CPE12000PRO5X

Applicant: Telrad Networks Ltd.

Address: Israel Lod Industrial Center PO Box 6118

Manufacturer: Asiatelco

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Park, Pudong, Shanghai, PRC

Prepared by: BV 7Layers Communications Technology (Shenzhen) Co. Ltd

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Issued Date: Aug. 05, 2019

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TABLE OF CONTENTS

R	RF EXPOSURE REPORT	1
R	RELEASE CONTROL RECORD	3
1	CERTIFICATION	4
2	GENERAL INFORMATION	5
	2.1 GENERAL DESCRIPTION OF EUT	5
3	RF EXPOSURE	7
	3.1 LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)	7
	3.2 MPE CALCULATION FORMULA	7
	3.3 CLASSIFICATION	7
	3.4 CALCULATION RESULT OF MAXIMUM CONDUCTED POWER	8

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RELEASE CONTROL RECORD

ISSUE NO. REASON FOR CHANGE		DATE ISSUED	
SA190116W005	Original release	Aug. 05, 2019	

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1 CERTIFICATION

PRODUCT: Out Door Unit

BRAND NAME: Telrad

MODEL NAME: CPE12000U PRO

APPLICANT: Telrad Networks Ltd.

STANDARDS: FCC Part 2 (Section 2.1091)

FCC OET Bulletin 65, Supplement C (01-01)

KDB 447498 D01 General RF Exposure Guidance v06

IEEE C95.1

The above equipment has been tested by BV 7Layers Communications Technology (Shenzhen) Co. Ltd and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

PREPARED BY : ______, DATE: ______ Aug. 05, 2019

APPROVED BY : ______, DATE: _____, Aug. 05, 2019

(Luke Lu / Manager)



2 GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

EUT	Out Door Unit			
MODEL NO.	CPE12000U PRO			
POWER SUPPLY	54Vdc (POE)			
MODULATION TYPE	64QAM, 16QAM, QPSK			
MODULATION TECHNOLOGY	OFDM			
OPERATING FREQUENCY	5150 ~ 5250MHz, 5725 ~ 5850MHz			
DEVICE CAPABILITIES	LTE-TDD BAND 46 (10/20MHz BW) Support SISO and MIMO mode: 2TX 4RX			
AVERAGE POWER	31.62mW for 5150 ~ 5250MHz(10MHz) 31.62mW for 5725 ~ 5850MHz(10MHz) 31.62mW for 5150 ~ 5250MHz(20MHz) 31.62mW for 5725 ~ 5850MHz(20MHz)			
ANTENNA TYPE	Directional Antenna with 21dBi gain			
HW VERSION	P2			
SW VERSION	KT2A_OTE29_TRD_1.0.0.21			
I/O PORTS	Refer to user's manual			
CABLE SUPPLIED	RJ45 cable: non-shielded, detachable, 1.0 m			

NOTE:

1. For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.



2. The EUT was powered by the following POE:

POE			
BRAND:	N/A		
MODEL:	PSE801G		
INPUT:	AC 100-240V, 700mA		
OUTPUT:	DC 48-56V, 500mA		

3. For the test results, the EUT had been tested with all conditions. But only the worst case was shown in test report.



3 RF EXPOSURE

3.1 LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

FREQUENCY ELECTRIC FIELD STRENGTH (V/m)		MAGNETIC FIELD STRENGTH (A/m)	POWER DENSITY (mW/cm²)	AVERAGE TIME (minutes)			
LIMITS FOR GENERAL POPULATION / UNCONTROLLED EXPOSURE							
300-1500			F/1500	30			
1500-100,000			1.0	30			

F = Frequency in MHz

3.2 MPE CALCULATION FORMULA

Pd = (Pout*G) / (4*pi*r2)

where

Pd = power density in mW/cm2

Pout = output power to antenna in mW

G = gain of antenna in linear scale

Pi = 3.1416

R = distance between observation point and center of the radiator in cm

3.3 CLASSIFICATION

The antenna of this product, under normal use condition, is at least 20cm away from the body of the user. So, this device is classified as **Mobile Device**.



3.4 CALCULATION RESULT OF MAXIMUM CONDUCTED POWER

THE WORST CASE IS SISO MODE

Frequency (MHz)	Operating Mode	Antenna Gain (dBi)	Tune-up Power (dBm)	Tune-up Power (mW)	Power Density (mW/cm^2)	limit (mW/cm^2)	PASS / FAIL
5150-5250	QPSK	21	15	31.62	0.79	1.00	PASS
5725-5850	QPSK	21	15	31.62	0.79	1.00	PASS

--END--

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