



RF EXPOSURE REPORT

REPORT NO.: SA121015E03

MODEL NO.: TD-W8961ND

FCC ID: TE7TDW8961NDV3

RECEIVED: Oct. 15, 2012

TESTED: Dec. 20, 2012

ISSUED: Jan. 15, 2013

APPLICANT: TP-LINK TECHNOLOGIES CO., LTD.

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ISSUED BY: Bureau Veritas Consumer Products Services
(H.K.) Ltd., Taoyuan Branch Hsin Chu Laboratory

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RELEASE CONTROL RECORD

| ISSUE NO. | REASON FOR CHANGE | DATE ISSUED |
|-------------|-------------------|---------------|
| SA121015E03 | Original release | Jan. 15, 2013 |



1. CERTIFICATION

PRODUCT: 300Mbps Wireless N ADSL2+ Modem Router
BRAND NAME: TP-LINK
MODEL NO.: TD-W8961ND
TEST SAMPLE: ENGINEERING SAMPLE
APPLICANT: TP-LINK TECHNOLOGIES CO., LTD.
TESTED DATE: Dec. 20, 2012
STANDARDS: FCC Part 2 (Section 2.1091)
FCC OET Bulletin 65, Supplement C (01-01)
IEEE C95.1

The above equipment (Model: TD-W8961ND) has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, 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:** Jan. 15 2013
(Elsie Hsu, Specialist)

APPROVED BY :  , **DATE:** Jan. 15 2013
(May Chen, Deputy Manager)

2. RF EXPOSURE LIMIT

LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

| FREQUENCY RANGE (MHz) | ELECTRIC FIELD STRENGTH (V/m) | MAGNETIC FIELD STRENGTH (A/m) | POWER DENSITY (mW/cm ²) | 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. MPE CALCULATION FORMULA

$$P_d = (P_{out} * G) / (4 * \pi * r^2)$$

where

P_d = power density in mW/cm²

P_{out} = output power to antenna in mW

G = gain of antenna in linear scale

π = 3.1416

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

4. 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**.

5. ANTENNA GAIN

| Transmitter Circuit | Antenna Type | Gain (dBi) (Exclude cable loss) | Connector type | Cable Loss(dB) | Frequency range (MHz to MHz) |
|---------------------|--------------|------------------------------------|------------------|----------------|---------------------------------|
| Chain (0) | Dipole | 3 | SMA Male Reverse | 0.5 | 2400-2483.5 |
| Chain (1) | Dipole | 3 | SMA Male Reverse | 0.5 | 2400~2483.5 |

6. CALCULATION RESULT OF MAXIMUM CONDUCTED POWER

| FREQUENCY BAND (MHz) | MAX POWER (mW) | ANTENNA GAIN (dBi) | DISTANCE (cm) | POWER DENSITY (mW/cm ²) | LIMIT (mW/cm ²) |
|----------------------|----------------|--------------------|---------------|-------------------------------------|-----------------------------|
| 2412-2462 | 332.005 | 2.5 | 20 | 0.11746 | 1 |

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