GIGA-TMS INC.
8F, NO.31, LANE 169, KANG-NING ST.,HSI-CHIH, NEW TAIPEI CITY, 22180 TAIWAN

Federal Communications Commission
Authorization and Evaluation Division
Equipment Authorization Branch
7435 Oakland Mills Road
Columbia, MD 21046

Applicant's declaration concerning RF Radiation Exposure

We hereby indicate that the product
Product description: UHF RFID Reader/Writer Module
Model No: UM800H

The equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. The integral antennas used for this transmitter must not be co-located or operating in conjunction with any other antenna or transmitter within the host device.

A safety statement concerning minimum separation distances from enclosure of the Product : UHF RFID Reader/Writer Module
will be integrated in the user's manual to provide end-users with transmitter operating conditions for satisfying RF exposure compliance.

The appropriate information can be drawn from the test report no: W6M21911-19503-C-1 and the accompanying calculations.

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Date: 2019-11-29

Signature: *M. T. WANG*

3.2   Equivalent isotropic radiated power (EIRP)

FCC Rule: 15.247(b)(3)

EIRP = max. conducted output power + antenna gain

UHF (902-928 MHz)

EIRP = 26.84 dBm+ (9 dBi [antenna gain claimed by manufacturer]) = 35.84 dBm = 3837.07 mW

3.3   Exemption Limits for Routine Evaluation according to FCC KDB Publication

RESULT:

Test standard   :   FCC KDB Publication
                                                       447498 D01 General RF Exposure Guidance v06

According to 447498 D01 General RF Exposure Guidance v06:

SAR evaluation, by measurement or numerical simulation, is not required when the corresponding SAR

Exclusion Threshold condition, listed below, is satisfied.

3.3.1 RF Exposure Compliance Requirements

FCC OET Bulletin 65 Edition 97.01 determines the equations for predicting RF fields and applicable limits.

The prediction for power density in the far-field but will over-predict power density in the near field, where it could be used for walking a "worst case" or conservative prediction..

$$S = \frac{PG}{4\pi R^2}$$

S – Power Density
P – Output power EIRP
R – Distance
D – Cable Loss
AG – Antenna Gain

Item	Unit	Value	Remarks
P	mW	3837.07	Peak value
D	dB		
AG	dBi	9	
G		7.94	Calculated Value
R	cm	65	Assumed value
S	mW/cm^2	0.57	Calculated value

Limits:

Limit for General Population / Uncontrolled Exposure	
Frequency (MHz)	Power Density (mW/cm^2)
902.75	0.60