

MPE test report

According to the standard:

CFR 47 FCC PART 15

Equipment under test:

XGCS490B201

RFID compact station

FCC ID: Y7HXGCS4L

Company:

SCHNEIDER ELECTRIC INDUSTRIES

Distribution: Mr CORAZZA

(Company: Schneider Electric Industries)

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DESIGNATION OF PRODUCT: XGCS490B201 RFID compact station

Serial number (S/N): Without

Reference / model (P/N): XGCS490B201

Software version: 1.5

MANUFACTURER: SCHNEIDER ELECTRIC INDUSTRIES

COMPANY SUBMITTING THE PRODUCT:

Company: SCHNEIDER ELECTRIC INDUSTRIES

Address: BLD SALVADOR ALLENDE
ZONE INDUSTRIELLE N°3
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FRANCE

Responsible: Mr CORAZZA

Person present during the tests: Mr LAVIGNE (the first day)

DATE(S) OF TEST: From 7-Oct-20 to 9-Oct-20

TESTING LOCATION: EMITECH ANGERS laboratory at JUIGNE SUR LOIRE (49) FRANCE
FCC Accredited under US-EU MRA Designation Number: FR0009
Test Firm Registration Number: 873677

TESTED BY: S. LOUIS

VISA:



WRITTEN BY: S. LOUIS

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1. INTRODUCTION

This report presents the results of radio test carried out on the following radio equipment: **XGCS490B201 RFID compact station**, in accordance with normative reference.

The device under test integrates a RFID Radio part.

2. PRODUCT DESCRIPTION

Class:	B
Utilization:	Tag and barcode reader
Antenna type and gain:	integrated antenna, 0dBi
Operating frequency band:	From 13.110 MHz to 14.010 MHz
Channel spacing:	Not concerned
Modulation:	ASK
Power source:	24Vdc

Power level, frequency range and channels characteristics are not user adjustable.
The details pictures of the product and the circuit boards are joined with this file.

3. **NORMATIVE REFERENCE**

The standards and testing methods related throughout this report are those listed below.

They are applied on the whole test report even though the extensions (version, date and amendment) are not repeated.

CFR 47 (2020)	Radio Frequency Devices
ANSI C63.10	2013 Procedures for Compliance Testing of Unlicensed Wireless Devices.
447498 D01 General RF Exposure Guidance v06	RF Exposure procedures and equipment authorization policies for mobile and portable equipment
OET BULLETIN 65	Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields

4. **RF EXPOSURE**

MPE

Maximum measured power = 39.10 dB μ V/m = 0.000027 mW at 13.56 MHz

with $P = (E \times d)^2 / (30 \times G_p)$ with $d = 10\text{ m}$ and $G_p = 1$

In accordance with KDB 447498 D01 General RF Exposure Guidance v06:

$$PSD = EIRP / (4 \times \pi \times R^2)$$

$$\Rightarrow 0.000027 / (4 \times \pi \times (20\text{ cm})^2) = 0.0000000537\text{ mW/cm}^2 \text{ (limit = } 0.978\text{ mW/cm}^2)$$

The equipment fulfils the requirements on power density for general population/uncontrolled exposure and therefore fulfils the requirements of 47 CFR §1.1310.