

**TCB****GRANT OF EQUIPMENT  
AUTHORIZATION****TCB**

**Certification**  
**Issued Under the Authority of the**  
**Federal Communications Commission**  
**By:**

**SGS North America, Inc.**  
**620 Old Peachtree Road NW Suite 100**  
**Suwanee, GA 30024**

**Date of Grant: 02/08/2017**  
**Application Dated: 02/08/2017**

**Murata Manufacturing Co., Ltd.**  
**10-1, Higashikotari 1-chome**  
**Nagaokakyo-shi**  
**Kyoto, 617-8555**  
**Japan**

**Attention: MOTOO HAYASHI , GENERAL MANAGER**

**NOT TRANSFERABLE**

EQUIPMENT AUTHORIZATION is hereby issued to the named GRANTEE,  
and is VALID ONLY for the equipment identified hereon for use under the  
Commission's Rules and Regulations listed below.

**FCC IDENTIFIER:** VPYCMABZ  
**Name of Grantee:** Murata Manufacturing Co., Ltd.  
**Equipment Class:** Digital Transmission System  
**Notes:** LoRa module  
**Modular Type:** Limited Single Modular

<u>Grant Notes</u>	<u>FCC Rule Parts</u>	<u>Frequency Range (MHZ)</u>	<u>Output Watts</u>	<u>Frequency Tolerance</u>	<u>Emission Designator</u>
	15C	902.3 - 914.9	0.0746		
	15C	903.0 - 914.2	0.0644		

Power output is conducted at the antenna terminal. Limited Modular Approval. This device is to be used only for mobile and fixed application. The antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter, except in accordance with FCC multi-transmitter evaluation procedures as documented in this filing. End-Users must be provided with transmitter operation conditions for satisfying RF exposure compliance. OEM integrators must insure that the end user has no manual instructions to remove or install this module. For mobile and fixed operating configurations the antenna gain, including cable loss, must not exceed 1.04dBi for satisfying RF exposure compliance according to as defined in 2.1091. The Grantee is responsible for providing the documentation required for modular use to OEM/Integrators. This device supports 125KHz and 500KHz bandwidth modes.

900 MHz Band operation includes DTS and Hybrid modes of operation.