User's Manual

OWWCO Transceiver Module PN. 6221020 V1.1X

FCC ID # U3V6221020

Ohio Willow Wood Co 15441 Scioto Darby Rd Mt. Sterling, Ohio 43143 (740) 869-3377

April 30, 2007

FCC Compliance Information¹

This device complies with Part 15 of the FCC Rules.

Operation is subject to the following two conditions:

- 1) This device may not cause harmful interference, and
- 2) This device must accept any interference received, including interference that may cause undesired operation.

Note:

This equipment contains module , FCC ID U3V6221020, which qualifies as an UNLICENSED MODULAR TRANSMITTER per FCC Public Notice DA 00-1407. It has been tested and found to comply with Part 15.249 of the FCC Rules. This module has been designed for use by the Ohio Willow Wood Co. This module shall only be designed into products by The Ohio Willow Wood Co.

Warning:

Changes or modifications not expressly approved by The Ohio Willow Wood Company could void the user's authority to operate the equipment. This module may only be attached to host devices which are battery powered.

Required labeling.

Any device incorporating this module must include an external, visible, permanent marking or label which states:

"Contains FCC ID U3V6221020."

Failure to comply with this requirement will void the user's authority to operate any device that incorporates this module.

Specifications:

FCC ID U3V6221020

Input voltage 4.5 -12V DC Battery powered only Input current 37 mA

Operating temperature range -20°C to +50°C
Frequency range 2400 -2483 MHz.

Antenna Permanently soldered to Module

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Transmit power <2mW

Communication type Frequency Hopping Spread Spectrum.

500 kbps.

Data rate 500 kbps. Size 1.398" x 0.897"

¹ All information on this page shall be included in the manual of any device that incorporates FCC ID U3V6221020

Introduction

The Ohio Willow Wood Co (OWWCO) Transceiver Module PN. 6221020 V1.1X is a low power RF transceiver module that operates in the FCC approved 2400 - 2483MHz ISM band. The module has a peak output power of <2mw and, due to its very low power, has no separation requirements for safe usage.

Integration into final products.

The 6221020 has been certified as a module under FCC rules and requires no further certification so long as the following labeling constraints are met

1) Any device incorporating this module must include and external, visible, permanent marking or label which states:

"Contains FCC ID U3V6221020."

2) The manual of any device incorporating this module must contain the following:

"Contains FCC ID U3V6221020

This device complies with Part 15 of the FCC Rules.

Operation is subject to the following tow conditions:

- 1) This device may not cause harmful interference, and
- 2) This device must accept any interference received, including interference that may cause undesired operation."
- 3) The 6221020 is powered by an external supply voltage of 4.5 12V DC (battery powered only) with a current capacity of at least 35 ma.
- 4) The manual from the device incorporating the module must include page one of this manual.

Board design, wiring, and interface.

This module is designed by OWWCO and intended to be incorporated into products only by OWWCO personnel. Please refer to OWWCO document 6221021001_V1.12.sch, available from the engineering department at OWWCO, for specific circuit information. Power to the module is supplied through Vmri. Multiple DIO and Analog input lines are available for system integration as shown in the schematics. All mother boards designed for use with the module should incorporate a ground plane that extends across the full area under the module up to the level of the antenna. The area under the antenna must not contain traces or planes.

PCB footprint

The size of the module PCB is shown below. Further information about the layout and spacing on the PCB is available from the OWWCO engineering department and is contained in OWWCO document 6221021001_V1.12.brd.

