

B.E.A. K-Band Transceiver 21.0192 (BEA-T2)

User Guide

History :			
Date		Author	Version
2011/12/06	First release	JPL	1.00
2012/01/19	InstructionS for OEM integrator	JPL	1.01
2012/03/09	Additional instructionS for OEM integrator	JPL	1.02

FCC ID : G9B-210192
IC ID : 4680A-210192

BEA Inc. (Bureau d'Electronique Appliquée)
100 Enterprise Drive, RIDC Park West
Pittsburgh, PA 15275, USA
Phone: (412) 249 4100

1. Functional description of BEA-T1 Transceiver.

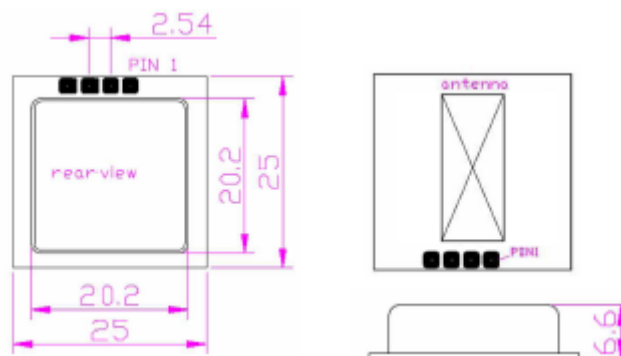
The DRO module P/N, 21.0192 consists of a 24.150GHz Microwave Transceiver and is used in Doppler movement detectors.

2. Electrical specifications.

Output frequency :	24.125 GHz \pm 50 MHz
Output power :	< 20 dBm
Type of modulation :	Continuous wave
ASK modulation :	none
Operating voltage :	Regulated DC 5 V \pm 5%
Operating current :	<35mA typ.
Frequency Drift vs Temperature Change :	< 1 MHz / °C
Operating temperature range :	-30 °C to +70 °C

3. Pin arrangement. (Single row pin header)

Pin	I/O	Description
1	Supply voltage	Vcc
2	Output signal phase	IF I
3	Ground	GND
4	Output signal quadrature	IF Q



4. Regulatory Compliance

- *This device has been tested and approved to be compliant with Part 15 of the FCC Rules and with RSS-210 of Industry Canada.*

Operation is subject to the following conditions:

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

4.1 FCC & IC Instructions

- *Changes or modifications made to the equipment not expressly approved by BEA Inc. may void the FCC & IC authorization to operate this equipment.*
- *The use of the BEA-T1B transceiver is authorized into mobile or fixed devices taking into account the conditions listed below :*
 - (1) OEM Integrator may be sure that the end user manual may not contain any information about the way to install or remove the module from the final product.*
 - (2) The following information is required to be incorporated in the user manual of the final system:*
 - This device has been tested and approved to comply with Part 15B unintentional radiator requirements*
 - The antenna of the module may not be removed, replaced nor modified. The antenna must not be co-located or operating in conjunction with any other antenna or transmitter. No additional antenna must be used.*
 - This device may not cause harmful interferences, and this device must accept any interference received, including interference that may cause undesired operation.*
 - (3) The module must be installed and used in strict accordance with the manufacturer's instructions as described in the user documentation that comes with the product.*
 - (4) Power supply of the module must be conform to the electrical specifications as described in § 2 of the current user manual.*
 - (5) The antenna of the module may not be removed, replaced nor modified. The antenna must not be co-located or operating in conjunction with any other antenna or transmitter. No additional antenna must be used.*
 - (6) OEM integrator is responsible for ensuring that after the module is installed and operational into the host, it continues to be compliant with the Part 15B unintentional radiator requirements.*
 - (7) A label with the words 'Contains FCC ID:G9B-210192' and 'Contains IC:4680A-210192' shall be applied and visible from the outside of the end product.*