

Model :USHR-800NI

Bi-directional Amplifier's Technical Description

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OPISYS, INC.

9201 Irvine blvd

Irvine, California

Tel: (949) 916 5283

Fax: (949) 916 5285

Email: koo@opisys.com

Web: www.opisys.com

FCC Part 2.983(d) Technical Description

(d)(1) Type or types of emission

- (a) TDMA : DXW
- (b) AMPS(FM) : F1X

(d)(2) Frequency Range

- (a) TDMA
 - Forward : 851 - 866 MHz
 - Reverse : 806 - 821 MHz
- (b) AMPS
 - Forward : 851 - 866 MHz
 - Reverse : 806 - 821 MHz

(d)(3) Range of Operating Power Levels, and description of any means provided for variation of operating power

- 43 dBm to + 7dBm (5 mW) (Gain : 50 dB)

(d)(4) Maximum power rating as defined in the applicable parts of the FCC rules

- 24.232(a) : Maximum Peak output power for base station transmitters should not exceed 100 Watts.
- 24.232(b) : Mobile/Portable stations are limited to 2 Watts EIRP peak power.

(d)(5) The dc voltages applied to and dc currents into the several elements of the final radio frequency amplifying device for normal operation over the power range

4.8 VDC at 60 mA on A3 and A6

(d)(6) Function of each electron tube or semiconductor or other active circuit device

Refer to Attachment : Data Sheet

(d)(7) Complete circuit diagram

Refer to Attachment : Circuit Diagram

(d)(8) Instruction books or installation manual

Refer to Attachment : Installation and Operations Manual

(d)(9) Tune-up procedure over the power range, or at specific operating power levels

Refer to Attachment : Installation and Operations Manual

(d)(10) A description of all circuitry and devices provided for determining and stabilizing frequency

N/A

(d)(11) A description of any circuits or devices employed for suppression of spurious radiation

Duplexer : F1, F3

Band Pass Filters : F2, F4

SAW Filters : SO1, SO2

(d)(11) A description of any circuits or devices employed for limiting modulation

N/A

(d)(11) A description of any circuits or devices employed for limiting power

If the output power level of reverse path(=Up Link) exceeds prescribed limit, then reverse path is disconnected and the FAIL LED (RED color) is on. Bi-directional amplifier automatically checks output power level every one minute of a 5 minute cycle when reverse path has over power . If reverse path still exceeds level then shut down mode continues for another 10 minutes. After 10 minutes, reverse path is switched on again and it checks output power level again. (Repeats the process)
Forward path procedure is same as reverse path.

(d)(12) For equipment employing digital modulation techniques, a detailed description of the modulation of the modulation system to be used, including the response characteristics (Frequency, phase, and amplitude) of any filters provided, and a description of the modulating wavetrain, shall be submitted for the maximum rated conditions under which the equipment will be operated.

N/A

(e) The data required by 2.985 through 2.997, inclusive, measured in accordance with the procedures set out in 2.999

**** Provided by FCC Approval Company after the tests. ****

(f) A photograph or drawing of the equipment identification plate or label showing the information to be placed thereon.

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(g) E.U.T 8 x 10 photographs

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