

USR-1900A/B Ultra Slim Repeater Technical Description

ACE Technology

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FCC Part 2.983(d) Technical Description

(d)(1) Type or types of emission

: G7W

(d)(2) Frequency Range

- 1) PCS CDMA : A Block
Forward: 1930 - 1945 MHz
Reverse : 1850 - 1865 MHz ,
- 2) PCS CDMA : B Block
Forward: 1950 - 1965 MHz
Reverse : 1870 - 1885 MHz

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

: -45dBm to +14dBm (Gain : 55 to 85 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.
The maximum output power is 14dBm

(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

: 5.0 VDC at 105 mA on U17 and U17A for USR-1900A
5.0 VDC at 105 mA on U17 and U17A for USR-1900B

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

:Refer to Attachment : Schematics and Parts list.

(d)(7) Complete circuit diagram

: Refer to Attachment : Schematics and Parts list.

(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

- 1) USR-1900A
U21,U21A : 10 MHz Reference for L.O PLL U20,U20A
- 2) USR-1900B
U21,U21A : 10 MHz Reference for L.O PLL U20,U20A

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

- 1) USR-1900A
Duplexer : U1, U1A,
Band pass Filters : U4,U4A,U13,U13A, U16,U16A, U18,U18A,U19,U19A
SAW Filters U7,U7A
- 2) USR-1900B
Duplexer : U1, U1A,
Band pass Filters : U4,U4A,U13,U13A, U16,U16A, U18,U18A,U19,U19A
SAW Filters U7,U7A

(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

Micro controller that limits the output to the specified output power level. If the unit detects that the output power exceeds the specified limit, the unit is put to stand-by mode with no output. If the condition persists for third iteration, power to the unit is cut off.

(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