

S SERIES

Base Stations & Repeaters

Base Stations & Repeaters

30 to 870 MHz

255 Channels

50/35 Watts RF Power

FLEX•MODE™

Remote Diagnostics

Windows Based Programming




Powerful. Innovative. Rugged and reliable. The new S Series is the smallest full specification Base Station/Repeater in its class. With advanced modular construction techniques, you are assured of reliable and long lasting performance.



WORLD CLASS RADIOS.™

Base Stations & Repeaters
 30 to 870 MHz
 255 Channels
 50/35 Watts RF Power

S SERIES
 Base Stations &
 Repeaters

<p>GENERAL</p> <p>Frequency - MHz 30-50 66-80* 72-88 135-160 148-174 195-225* 320-350* 345-375* 400-435 450-485 485-520 806-870</p> <p>Channels 255 (Binary) RF Output - Watts 50 W below 800 MHz 35 W above 800 MHz Power Supply 13.8 VDC (110/240 VAC w/opt Power Supply) Analog Performance Conforms to TIA / EIA 603 Operating Temperature - C° -30 to +60 Size - W x H x D - in. 19 (483 mm) x 3.5 (2 RU or 89 mm) x 13 (360 mm) Weight - lbs. 19.8 (9 kg) Programming RS-232 Diagnostics (Remote) Voltage, Temp, VSWR, TX Power, RSSI, VCO Volts</p> <p>Optional Features: Cross-banding Local Control 100 Watts RF Output (Below 800) 75 + 140 Watts RF Output (Above 800) Simplex Change over relay (Base/Simplex Operation) Low Standby Current (195 MA)</p> <p>* For export and Federal Government only.</p>	<p>RECEIVER</p> <p>Sensitivity (12 dB SINAD) < -117 dBm (-120 dBm typical) Intermodulation Rejection -80 dB min. below 800 MHz -70 dB min. above 800 MHz SQ Threshold < 8 dB SINAD Tight Squelch > 20 dB SINAD Adjacent Channel Rejection 25 kHz 85 dB 12.5 kHz 78 dB Signal Displacement Bandwidth 12.5 kHz ≤ 1 kHz 25 kHz ≤ 2 kHz Frequency Stability -ppm ± 1 below 400 MHz ± 1.0 above 400 MHz Spurious & Image Response Rejection >-100 dB Audio Response DC to 3000 Hz (-3.0 dB) Audio distortion <2% total harmonic distortion maximum FM Hum and Noise 25 kHz >50 dB 12.5 kHz >45 dB RF Input Impedance 50 ohms with type "N" (F) Blocking >100 dB Audio Output 600 Ohms balanced (differential) 0 dBm nominal Adjustable +10 to -15 dBm for 60% System Deviation RF Signal Power Consumption < 600 mA (typical 440mA) Rx Audio Filters HighPass (enable/disable) Pre-Emphasis (enable/disable) Compression (enable/disable) (Internal Jumpers)</p>																				
<p>TRANSMITTER</p> <p>Transmit Output Power 15 W - 50 W below 800 MHz 100% Duty Cycle 15 W - 50 W above 800 MHz Power Amplifier Protection High Temp and High VSWR (auto) Transmitter Current Drain < 11 Amps (8.6 Amps typical) Transmit Bandwidth Full band Output Impedance - ohms 50 ohms nominal, Type "N" (F) Spurious and Harmonic > -90 dBc Carrier Attack Time 4 ms typical (with VCO "on") 20 ms typical (with VCO "off")</p> <p>Hum and Noise 5 kHz -50 dB minimum 2.5 kHz -44 dB minimum Audio Response +1 to -3 dB (Per TIA) Pre-Emphasis Curve Audio Distortion ≤ 2% 1000 Hz @ 60% RSD Audio Input 600 Ohms unbalanced (+6 to -10 dBm) Audio (Line) Input Sensitivity +10 dBm to -10 dBm variable Audio Input Response 300 Hz to 3.0 kHz (with High Pass/ Low Pass) Audio Input Conditioning HighPass (enable/disable) Pre-Emphasis (enable/disable) Compression (enable/disable) (Internal Jumpers) Deviation Limiting ±5 kHz or ±2.5 kHz maximum system deviation (programmable) Data Capable DC to 3.4 kHz Frequency Response</p>	<p>FCC TYPE ACCEPTANCE</p> <table border="1"> <thead> <tr> <th>FCC Part</th> <th>Band</th> <th>FCC ID</th> <th>Emissions</th> </tr> </thead> <tbody> <tr> <td>22, 74, 90, 90.210</td> <td>VHF</td> <td>ARUSRV50B</td> <td>16K0F3E, 16K0F9W, 11K0F3E, 11K0F9W</td> </tr> <tr> <td>90, 90.210</td> <td>UHF</td> <td>ARUSRU50ABC</td> <td>16K0F3E, 16K0F9W 11K0F3E, 11K0F9W</td> </tr> <tr> <td>22,90</td> <td>800 MHz</td> <td>ARUSRE35AB</td> <td>16K0F3E, 14K8F2D,</td> </tr> <tr> <td>22,90</td> <td>LB</td> <td>OKRMX800AB</td> <td>16K0F3E</td> </tr> </tbody> </table> <p>Specifications subject to change without notice. Measurements made in accordance with applicable EIA standards. © 2001 RELM Wireless Corporation</p> <p></p> <p>A DIVISION OF RELM WIRELESS CORPORATION 7100 TECHNOLOGY DRIVE • WEST MELBOURNE, FL 32904 800-648-0947 • (321) 984-1414 • Fax (321) 984-0434 www.relm.com</p>	FCC Part	Band	FCC ID	Emissions	22, 74, 90, 90.210	VHF	ARUSRV50B	16K0F3E, 16K0F9W, 11K0F3E, 11K0F9W	90, 90.210	UHF	ARUSRU50ABC	16K0F3E, 16K0F9W 11K0F3E, 11K0F9W	22,90	800 MHz	ARUSRE35AB	16K0F3E, 14K8F2D,	22,90	LB	OKRMX800AB	16K0F3E
FCC Part	Band	FCC ID	Emissions																		
22, 74, 90, 90.210	VHF	ARUSRV50B	16K0F3E, 16K0F9W, 11K0F3E, 11K0F9W																		
90, 90.210	UHF	ARUSRU50ABC	16K0F3E, 16K0F9W 11K0F3E, 11K0F9W																		
22,90	800 MHz	ARUSRE35AB	16K0F3E, 14K8F2D,																		
22,90	LB	OKRMX800AB	16K0F3E																		