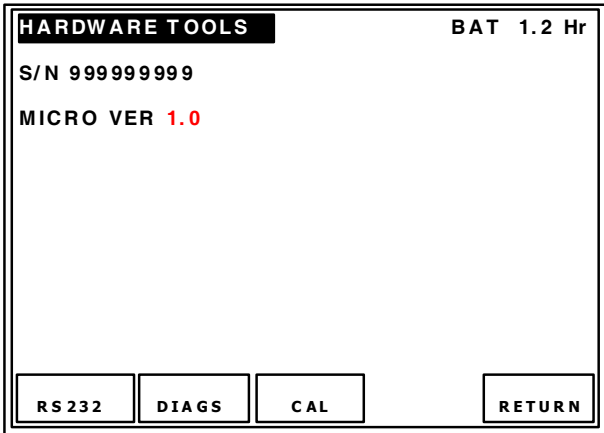
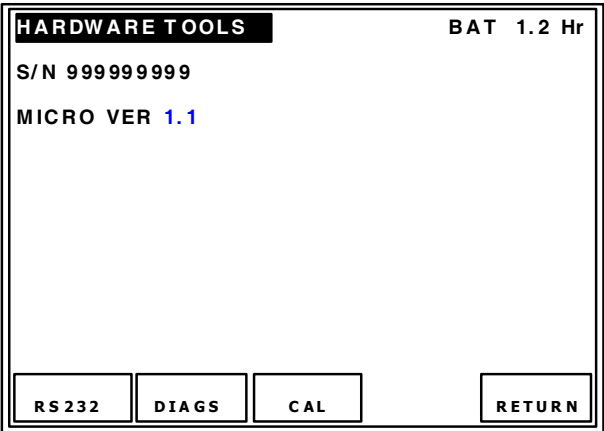


# IFR 4000 Operation Manual (Issue-5)

## SUMMARY OF CHANGES

ERRATA SHEETS/REVISIONS INCORPORATED
None
ECNS INCORPORATED
None
MISCELLANEOUS CHANGES
<p>Export notice added to each page, and date on each page changed to match date of Issue.</p> <p>Table of Contents and Index changed to match the page shifts (if required).</p> <p>Other pages may have been changed to correct previous errors or to match current style and layout standards (if required).</p>

Detailed changes incorporated into Issue-5 of the IFR 4000 Operation Manual include the following:

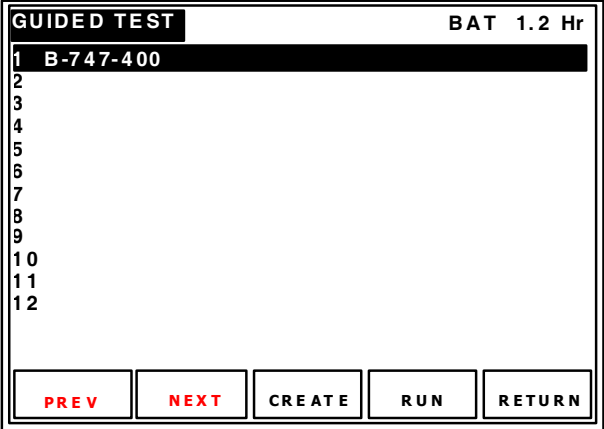
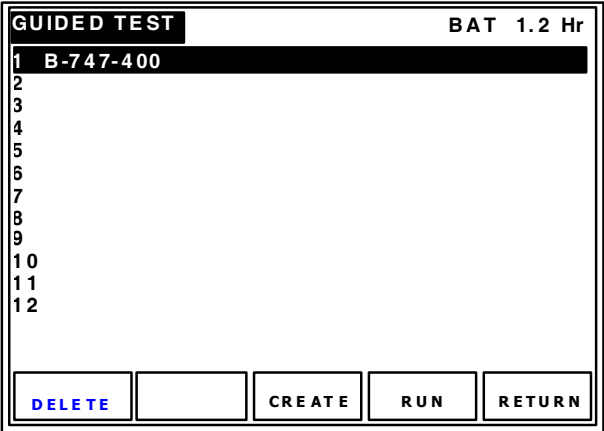
PAGE	CHANGE
1-2-3, Page 1	<p><b>WAS</b></p>  <p><b>IS</b></p> 

## IFR 4000 Operation Manual (Issue-5)


### SUMMARY OF CHANGES

PAGE	CHANGE
1-2-4, Page 3	<p><b>WAS</b></p> <p><b>EXT ATTN</b></p> <p>This parameter allows for compensation (0.0 to <b>10.0</b> dB) ...</p> <p><b>IS</b></p> <p><b>EXT ATTN</b></p> <p>This parameter allows for compensation (0.0 to <b>22.0</b> dB) ...</p>

SUMMARY OF CHANGES

PAGE	CHANGE
1-2-4, Page 4	<p data-bbox="423 289 727 321"><b>(GUIDED Test Screen)</b></p> <p data-bbox="423 336 487 367"><b>WAS</b></p> <div data-bbox="630 388 1230 814">  </div> <p data-bbox="423 835 581 867"><b>SOFT KEYS</b></p> <p data-bbox="469 882 1122 913">The <b>PREV</b> Soft Key moves the cursor up one line.</p> <p data-bbox="469 928 1156 959">The <b>NEXT</b> Soft Key moves the cursor down one line.</p> <p data-bbox="423 1018 451 1050"><b>IS</b></p> <div data-bbox="630 1066 1230 1493">  </div> <p data-bbox="423 1560 581 1591"><b>SOFT KEYS</b></p> <p data-bbox="469 1606 1442 1665">The <b>DELETE</b> Soft Key displays the Password Screen and, if the Password is currently entered, the Delete Store Screen.</p>

SUMMARY OF CHANGES

PAGE	CHANGE
1-2-4, Page 5	<p><b>ADD</b></p> <p><b>Delete Store Screen</b></p>  <p><b>SOFT KEYS</b></p> <p>The <b>YES</b> Soft Key deletes the stored sequence.</p> <p>The <b>NO</b> Soft Key ignores the sequence deletion and displays the Guided Test Screen.</p>

SUMMARY OF CHANGES

PAGE	CHANGE
1-2-3, Page 7	<div data-bbox="418 289 488 321" style="color: red;">WAS</div> <div data-bbox="630 342 1230 770"> <div> <div>HARDWARE TOOLS</div> <div>BAT 1.2 Hr</div> <div>S/N 999999999</div> <div>MICRO VER 1.0</div> <div>RS 232</div> <div>DIAGS</div> <div>CAL</div> <div>RETURN</div> </div> </div> <div data-bbox="418 789 453 821" style="color: blue;">IS</div> <div data-bbox="630 837 1230 1266"> <div> <div>HARDWARE TOOLS</div> <div>BAT 1.2 Hr</div> <div>S/N 999999999</div> <div>MICRO VER 1.1</div> <div>RS 232</div> <div>DIAGS</div> <div>CAL</div> <div>RETURN</div> </div> </div>

SUMMARY OF CHANGES

PAGE	CHANGE
1-2-4, Page 10	<p>(Info Screen)</p> <p><b>WAS</b></p> <div data-bbox="625 386 1221 814"> <div>INFO</div> <div>BAT 1.2 Hr</div> <hr/> <div>VERSION 2.06</div> <div>           BOOT SW VER 1.01            FPGA FW VER 1.2            CPLD FW VER 1.0         </div> <div>           OPTIONS            ELT         </div> <div>RETURN</div> </div> <p><b>IS</b></p> <div data-bbox="625 926 1221 1354"> <div>INFO</div> <div>BAT 1.2 Hr</div> <hr/> <div>VERSION 2.10</div> <div>           BOOT SW VER 1.01            FPGA FW VER 1.2            CPLD FW VER 1.0         </div> <div>           OPTIONS            ELT         </div> <div>RETURN</div> </div>

SUMMARY OF CHANGES

PAGE	CHANGE
1-2-4, Page 22	<p><b>WAS</b></p> <p><b>TX PWR</b></p> <p>This Field displays the transmitter power received (0.1 to 30 W) ...</p> <p><b>IS</b></p> <p><b>TX PWR</b></p> <p>This Field displays the transmitter power received (0.1 to 1999 W) ...</p> <p><b>WAS</b></p> <p><b>SOFT KEYS</b></p> <p>The <b>HOLD/CLEAR</b> Soft Key toggles the screen between “Holding” the last measured UUT TX FREQ and TX MOD and “clearing” the last measured TX FREQ and TX MOD. With HOLD selected, the UUT TX parameters are not transmitted upon subsequent transmitter keying and <b>HOLD TX</b> is displayed. The <b>HOLD/CLEAR</b> Soft Key must be pressed again to allow the display to update.</p> <p><b>IS</b></p> <p><b>SOFT KEYS</b></p> <p>The <b>HOLD/CLEAR</b> Soft Key toggles the screen between “Holding” the peak measured UUT TX FREQ and TX MOD, and “clearing” the peak measured TX FREQ, TX MOD and TX PWR. With HOLD selected, the UUT TX parameters are not transmitted upon subsequent transmitter keying and <b>HOLD TX</b> is displayed. The <b>HOLD/CLEAR</b> Soft Key must be pressed again to allow the display to update.</p>

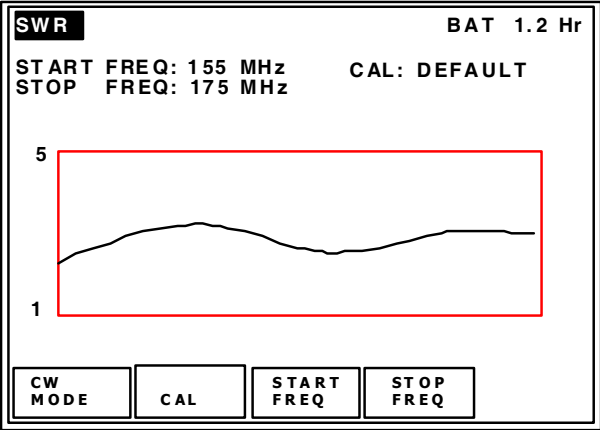
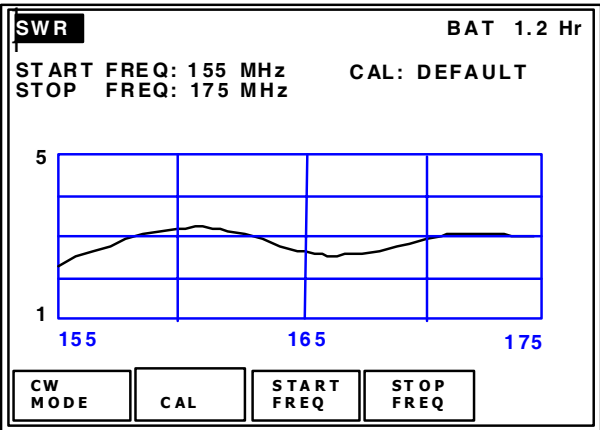
SUMMARY OF CHANGES

PAGE	CHANGE
1-2-4, Page 24	<p><b>WAS</b></p> <p><b>TX PWR</b></p> <p>This Field displays the transmitter power received (0.1 to 30 W) ...</p> <p><b>IS</b></p> <p><b>TX PWR</b></p> <p>This Field displays the transmitter power received (0.1 to 1999 W) ...</p> <p><b>WAS</b></p> <p><b>SOFT KEYS</b></p> <p>The <b>HOLD/CLEAR</b> Soft Key toggles the screen between “Holding” the last measured UUT TX FREQ and TX MOD and “clearing” the last measured TX FREQ and TX MOD. With HOLD selected, the UUT TX parameters are not transmitted upon subsequent transmitter keying and <b>HOLD TX</b> is displayed. The <b>HOLD/CLEAR</b> Soft Key must be pressed again to allow the display to update.</p> <p><b>IS</b></p> <p><b>SOFT KEYS</b></p> <p>The <b>HOLD/CLEAR</b> Soft Key toggles the screen between “Holding” the peak measured UUT TX FREQ and TX MOD, and “clearing” the peak measured TX FREQ, TX MOD and TX PWR. With HOLD selected, the UUT TX parameters are not transmitted upon subsequent transmitter keying and <b>HOLD TX</b> is displayed. The <b>HOLD/CLEAR</b> Soft Key must be pressed again to allow the display to update.</p>

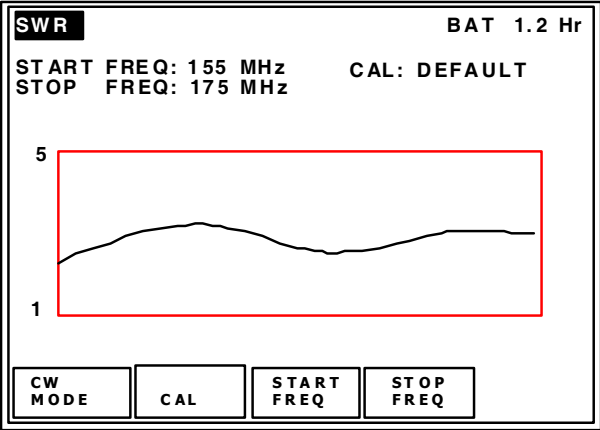
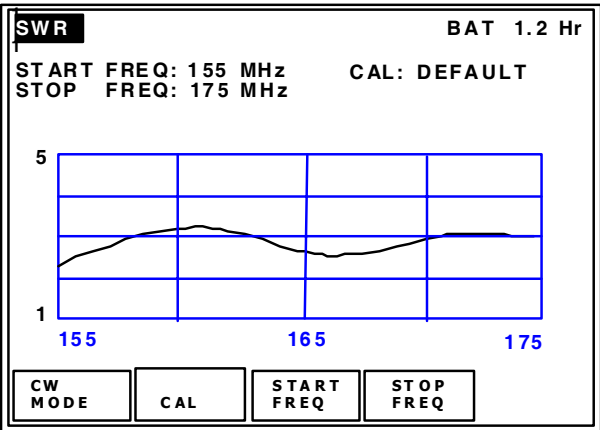
SUMMARY OF CHANGES

PAGE	CHANGE
1-2-4, Page 26	<p><b>WAS</b></p> <p><b>TX PWR</b></p> <p>This Field displays the transmitter power received (0.1 to 30 W) ...</p> <p><b>IS</b></p> <p><b>TX PWR</b></p> <p>This Field displays the transmitter power received (0.1 to 1999 W) ...</p> <p><b>WAS</b></p> <p><b>SOFT KEYS</b></p> <p>The <b>HOLD/CLEAR</b> Soft Key toggles the screen between “Holding” the last measured UUT TX FREQ and TX MOD and “clearing” the last measured TX FREQ and TX MOD. With HOLD selected, the UUT TX parameters are not transmitted upon subsequent transmitter keying and <b>HOLD TX</b> is displayed. The <b>HOLD/CLEAR</b> Soft Key must be pressed again to allow the display to update.</p> <p><b>IS</b></p> <p><b>SOFT KEYS</b></p> <p>The <b>HOLD/CLEAR</b> Soft Key toggles the screen between “Holding” the peak measured UUT TX FREQ and TX MOD, and “clearing” the peak measured TX FREQ, TX MOD and TX PWR. With HOLD selected, the UUT TX parameters are not transmitted upon subsequent transmitter keying and <b>HOLD TX</b> is displayed. The <b>HOLD/CLEAR</b> Soft Key must be pressed again to allow the display to update.</p>

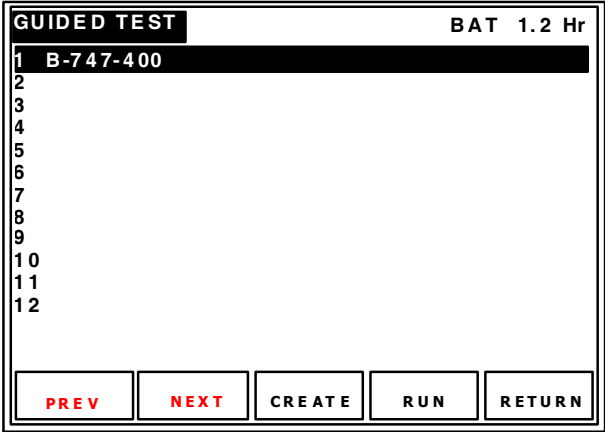
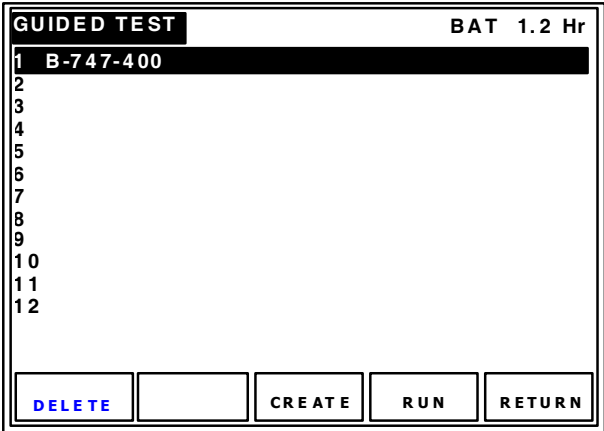
SUMMARY OF CHANGES

PAGE	CHANGE
1-2-4, Page 28	<p><b>WAS</b></p>  <p><b>IS</b></p> 

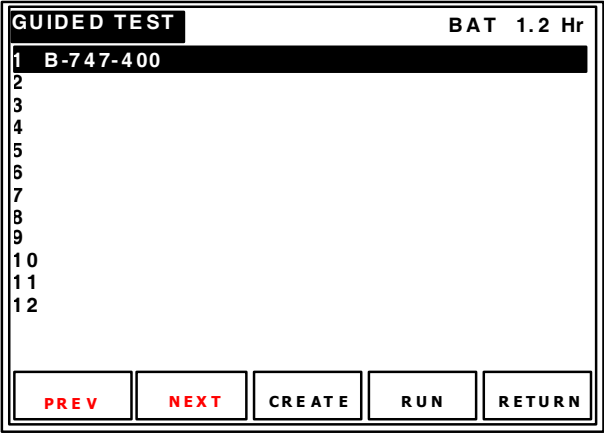
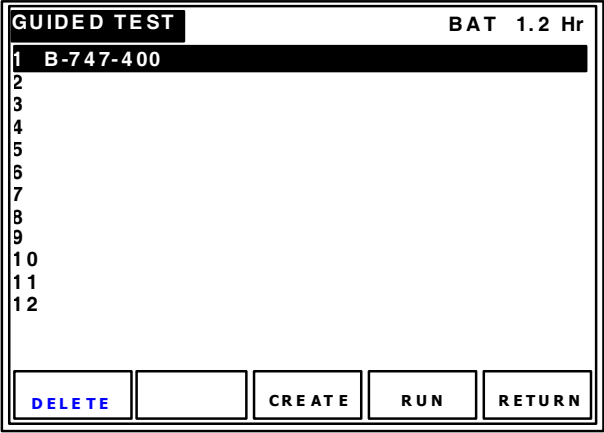
SUMMARY OF CHANGES

PAGE	CHANGE
1-2-4, Page 55	<p><b>WAS</b></p>  <p><b>IS</b></p> 

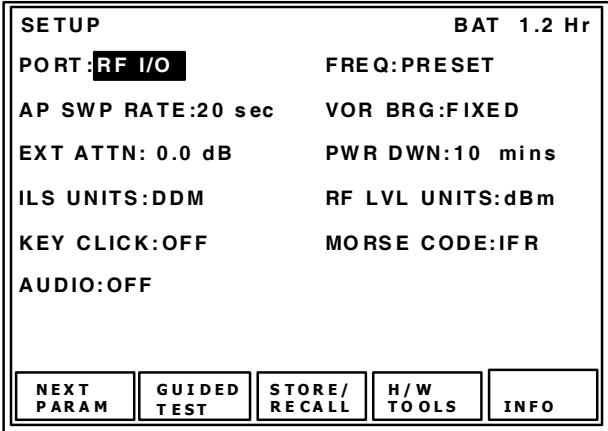
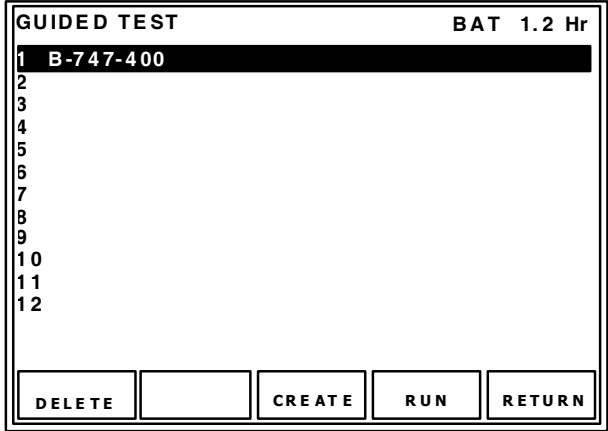
## SUMMARY OF CHANGES

PAGE	CHANGE
1-2-4, Page 60	<p><b>WAS</b></p>  <p>3. Press <b>PREV</b> or <b>NEXT</b> Soft Keys to select an empty store location.</p> <p><b>IS</b></p>  <p>3. Use the <b>INCREMENT/SELECT</b> Data Key or the <b>DECREMENT/ SELECT</b> Data Key to select an empty store location.</p>

## SUMMARY OF CHANGES

PAGE	CHANGE
1-2-4, Page 61	<p data-bbox="422 289 487 321"><b>WAS</b></p> <div data-bbox="630 342 1230 772">  <p>The screenshot shows a terminal window titled 'GUIDED TEST' with a battery status 'BAT 1.2 Hr'. A list of 12 items is displayed, with item 1 highlighted in black and labeled 'B-747-400'. At the bottom, there are five buttons: 'PREV', 'NEXT', 'CREATE', 'RUN', and 'RETURN'.</p> </div> <p data-bbox="451 789 1377 821">3. Press <b>PREV</b> or <b>NEXT</b> Soft Keys to select the named store location.</p> <p data-bbox="422 877 451 909"><b>IS</b></p> <div data-bbox="630 930 1230 1360">  <p>The screenshot shows a terminal window titled 'GUIDED TEST' with a battery status 'BAT 1.2 Hr'. A list of 12 items is displayed, with item 1 highlighted in black and labeled 'B-747-400'. At the bottom, there are four buttons: 'DELETE', an empty box, 'CREATE', 'RUN', and 'RETURN'.</p> </div> <p data-bbox="451 1377 1409 1434">3. Use the <b>INCREMENT/SELECT</b> Data Key or the <b>DECREMENT/SELECT</b> Data Key to select the named store location.</p>

## SUMMARY OF CHANGES

PAGE	CHANGE
1-2-4, Page 61	<p data-bbox="423 296 483 317"><b>ADD</b></p> <p data-bbox="423 354 756 378"><b>DELETING A SEQUENCE</b></p> <p data-bbox="451 401 1143 424">1. Press the SETUP Key to display the Setup Menu.</p> <div data-bbox="626 447 1230 875">  </div> <p data-bbox="451 898 1406 921">2. Press the GUIDED TEST Soft Key to display the Guided Test Screen.</p> <div data-bbox="626 945 1230 1373">  </div> <p data-bbox="451 1421 1414 1476">3. Use the INCREMENT/SELECT Data Key or the DECREMENT/ SELECT Data Key to select the stored sequence for deletion.</p>

SUMMARY OF CHANGES

PAGE	CHANGE								
1-2-4, Page 61	<p><b>ADD (cont)</b></p> <p>4. Press the DELETE Soft Key to display the Guided Test Password Screen</p> <div data-bbox="630 415 1230 844" data-label="Image"> </div> <p>5. Enter the Password (provided with the Test Set) by pressing the applicable Soft Keys. The Delete Store Screen is displayed.</p> <div data-bbox="630 966 1230 1394" data-label="Image"> </div> <p>6. Press the YES Soft Key to delete the stored sequence or the NO Soft Key to return to the Guided Test Screen.</p>								
1-3-1, Page 2	<p><b>ADD</b></p> <p>RF I/O Connector (10 to 75 MHz):</p> <table> <tr> <td>Single Carrier:</td> <td>-40 to -130 dBm in 0.5 dB steps</td> </tr> <tr> <td>Accuracy:</td> <td></td> </tr> <tr> <td>-40 to -94.5 dBm:</td> <td>±2 dB</td> </tr> <tr> <td>-95 to -120 dBm:</td> <td>±3 dB</td> </tr> </table>	Single Carrier:	-40 to -130 dBm in 0.5 dB steps	Accuracy:		-40 to -94.5 dBm:	±2 dB	-95 to -120 dBm:	±3 dB
Single Carrier:	-40 to -130 dBm in 0.5 dB steps								
Accuracy:									
-40 to -94.5 dBm:	±2 dB								
-95 to -120 dBm:	±3 dB								

SUMMARY OF CHANGES

PAGE	CHANGE
1-3-1, Page 2	<p><b>ADD</b></p> <p>RF I/O Connector (10 to 75 MHz):</p> <p>Single Carrier: -40 to -130 dBm in 0.5 dB steps</p> <p>Accuracy:</p> <p>-40 to -94.5 dBm: <math>\pm 2</math> dB</p> <p>-95 to -120 dBm: <math>\pm 3</math> dB</p>
1-3-1, Page 9	<p><b>Power Meter (RF I/O Connector)</b></p> <p><b>WAS</b></p> <p>Power Range: 100 to 300 W</p> <p><b>IS</b></p> <p>Power Range: 100 to 1999 W</p> <p><b>WAS</b></p> <p>Accuracy: <math>\pm 8\%</math> of reading, <math>\pm 1</math> Count, CW Only (without External Attenuator)</p> <p><b>IS</b></p> <p>Accuracy:</p> <p>&lt;100 MHz: <math>\pm 12\%</math> of reading, <math>\pm 1</math> Count, CW Only (without External Attenuator)</p> <p>100 to 400 MHz: <math>\pm 8\%</math> of reading, <math>\pm 1</math> Count, CW Only (without External Attenuator)</p>