



Precaution:

Verify the instrument before use

Operation procedure:

A. Return loss

1. Switch on the N/A & allow it for 30 minutes to be warmed up.
2. Select the specified frequency band on X-axis and do the calibration of both the ports
3. Connect the cable to both the ports, press 'Display' button to select 4 traces for the cable.
4. Press 'trace Prev'/'trace Next' to select S11.
5. Press 'Format' button to select 'log mag'.
6. Press 'Marker' button to add marker1.
7. Press 'Search' button to select maximum.
8. Now record the minimum value of return loss from one end (S11)
9. Repeat the steps to note minimum value of return loss from another end (S22)

B. VSWR measurement

1. Press 'trace Prev'/'trace Next' to select S11.
2. Press 'Format' button to select SWR
3. Press 'Search' button to select maximum
4. Note down maximum value of VSWR from one end (S11)
5. Repeat the steps from 1-4 to note down maximum value of VSWR from the other end (S22)

C. Impedance measurement

1. Press 'trace Prev'/'trace Next' to select S11.
2. Press 'Format' button to select Smith Chart and opt for (R+jx) to get impedance
3. Press 'Search' button to select marker1 at 200MHz
4. Also press 'Marker Function' button and select statistics ON to get the mean value of impedance
5. Repeat the steps from 1-4 to note down mean, maximum value of impedance from another end (S22)

D. Attenuation measurement

1. Press 'trace Prev'/'trace Next' to select S12.
2. Press 'Format' button to select 'Log Mag'
3. Record the values of attenuation (Insertion loss in dB) by selection the marker at desired frequency
4. Calculate the record values of attenuation at 20°C using the temperature attenuation chart