

## Vector Network Analyser (VNA)

### Specification

Instrument: Vector network analyser  
Number of ports: 2  
Frequency range: 100 kHz – 20 GHz  
Microwave connectors on instrument: 3.5 mm (SMA)  
Power output 0 - 10 dBm over full frequency range  
Wide IF bandwidth 1 Hz – 10MHz

#### Dynamic range:

2 – 10 GHz : >115 dB  
10 – 20 GHz : >110 dB

#### Measurement capabilities:

Full S-parameters  
Power and frequency sweeps

#### Functions:

Autoscale  
Start, stop and centre frequency scans  
Continuous, single and hold sweep  
On screen markers  
Simple trace math  
Trace format (dB Mag, Phase, Lin Mag, Real, Imag)  
Average sweeps  
Variable sweep time  
RF on/off  
Variable number of points on sweep (>1000)

#### Means of calibrating the system

Touchscreen  
USB ports  
LAN connector  
Ability to control with LabVIEW  
Minimum 2 year warranty, preference 3 years  
Reference in and out connectors  
External trigger in and out  
GPIB Interface  
Latest delivery required by March 30<sup>th</sup> 2018