Sample System Configurations

System Configuration up to 3 GHz

Station: 4060-FS6-V0-1-1*;* 6" Probe station, manual; RF Option: Not required for this frequency range because the 44RFXGX-xx probe can be used!

Chuck: The station comes with an ambient chuck. Order any standard H1000 thermal chuck and plumbing option if needed. Calibration chuck is not needed at this frequency. If the user wants to occasionally calibrate the probe, then a cal substrate can fit on the standard chuck.

Microscope: Any standard microscope is OK.

Manipulators: 525VM*;* 100 TPI Rectilinear, vacuum base manipulator. Holds the 44RFXGX-xx probes.

Probes: 44RF8000SGX-xx: Coaxial probe with ground plane tip, SMA female connector, sized for 4000/8000 probe stations. Alternatives include a series resistor, a terminating resistor, or with both a series and terminating resistor (specify resistor value). Probes with UMC connectors with all above options are also available, specify "V" instead of "S" in the part number listed above.

Cables: *52-30* SMA to SMA cable 30" long, matches to the 44RF8000SGX-xx probes.

Vibration isolation table (always recommended): Choose any standard table.

Shielded Enclosure: 8800-ISE; Compact, easy to use shielded, dark enclosure. Can use "socks" for cables or specify SMA feedthrough ISE (SPP20010408).

System Configuration up to 40 GHz

(can be extended to 200 GHz by selecting 200 GHz probes)

Station: 4460-FS6-V0-1-1; 6" Probe station, semi-automatic; The semi-automatic station will make it easier to raise and lower the chuck to contact the probes, and it can make it easier to go back and forth between a calibration substrate and the DUT.

Chuck: The station comes with an ambient chuck. Order any standard H1000 thermal chuck and plumbing option if needed.

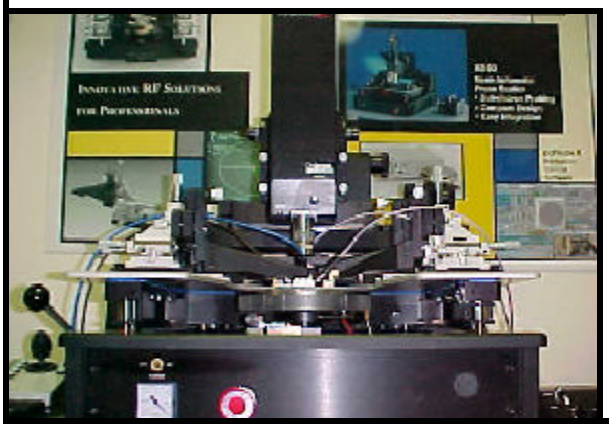
RF Option Provides: modification to platen to accept mechanical lock base manipulators, independent microscope lift, platen lift with microscope lift delay, Z Chuck mount and drive, and software modifications to support Z-lift chuck.

Add the CTAB-8000 option: This provides dual "tabs" on the chuck to hold the calibration substrates.

Microscope: An A-Zoom microscope is recommended.

***Manipulators*:** WAVE100/ML and WAVE200/ML; 40 TPI rectilinear manipulators with mechanical lock down bases. Manipulator to probe head link arm.

Model 4460 probe station shown with manipulators featuring mechanical lock bases.



Link Arms: PLF-8000 or PLS-8000; Microwave Link Arms, right angle or straight mount. Provides theta and planarity control.

Probes: PP40ASSSPPPMM, DC to 40 GHz, specify Ground, Signal, Ground pin configuration, pitch between pads (in microns) and mounting style.

Microwave Cables: PPKMM-48***;*** Semi-rigid, DC-40 GHz coax, with Male K connector ends, 48" long. Some equipment may require Female to Male cables (PPVFM-36), especially Vector Network Analyzers.

Vibration isolation table (always recommended): Choose any standard table.

Shielded Enclosure: 8800-LTE; *S*hielded, dark enclosure. Can use "socks" for cables or specify K connector feedthroughs.

Additional Accessories

Order standard accessory items to match the basic probe station:

System Configuration up to 3 GHz

- Probe card holders
- Laser Cutters
- Video systems
- Higher powered objectives

System Configuration up to 40 GHz

All items listed above plus:

- "DC" manipulators and probes to power device (if not done by probe card)

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Sample System Configurations – continued

System Configuration up to 3 GHz

Station: 8060-FS6-V0-1-1*;* 6" Probe station, manual; RF Option not required for this frequency range because the 44RFXGX-xx probe can be used! Independent microscope lift and platen lift with microscope lift delay.

Chuck: The station comes with an ambient chuck. Order any standard H1000 thermal chuck and plumbing option if needed. Calibration chuck is not needed at this frequency. If the user wants to occasionally calibrate the probe, then a cal substrate can fit on the standard chuck.

Microscope: Any standard microscope is OK.

Manipulators: 525VM*;* 100 TPI Rectilinear, vacuum base manipulator. Holds the 44RFXGX-xx probes.

Probes: 44RF8000SGX-xx: Coaxial probe with ground plane tip, SMA female connector, sized for 4000/8000 probe stations. Alternatives include a series resistor, a terminating resistor, or with both a series and terminating resistor (specify resistor value). Probes with UMC connectors with all above options are also available, specify "V" instead of "S" in the part number listed above.

Cables: *52-30* SMA to SMA cable 30" long, matches to the 44RF8000SGX-xx probes.

Vibration isolation table (always recommended): Choose any standard table.

Shielded Enclosure: 8800-ISE; Compact, easy to use shielded, dark enclosure. Can use "socks" for cables or specify SMA feedthrough ISE (SPP20010408).

System Configuration up to 40 GHz

(can be extended to 200 GHz by selecting 200 GHz probes)

Station: 8860-FS6-V0-1-1; 6" Probe station, semi-automatic; The semi-automatic station will make it easier to raise and lower the chuck to contact the probes, and it can make it easier to go back and forth between a calibration substrate and the DUT. Independent microscope lift and platen lift with microscope lift delay standard.

Chuck: The station comes with an ambient chuck. Order any standard H1000 thermal chuck and plumbing option if needed.

RF Option Provides: modification to platen to accept mechanical lock base manipulators, Z Chuck mount and drive, and software modifications to support Z-lift chuck.

Add the CTAB-8000 option: This provides dual "tabs" on the chuck to hold the calibration substrates.

Microscope: An A-Zoom microscope is recommended.

***Manipulators*:** WAVE100/ML and WAVE200/ML; 40 TPI rectilinear manipulators with mechanical lock down bases. Manipulator to probe head link arm.

Link Arms: PLF-8000 or PLS-8000; Microwave Link Arms, right angle or straight mount. Provides theta and planarity control.

Probes: PP40ASSSPPPMM, DC to 40 GHz, specify Ground, Signal, Ground pin configuration, pitch between pads (in microns) and mounting style.

Microwave Cables: PPKMM-48***;*** Semi-rigid, DC-40 GHz coax, with Male K connector ends, 48" long. Some equipment may require Female to Male cables (PPVFM-36), especially Vector Network Analyzers.

Vibration isolation table (always recommended): Choose any standard table.

Shielded Enclosure: 8800-LTE; *S*hielded, dark enclosure. Can use "socks" for cables or specify K connector feedthroughs.

Additional Accessories

Order standard accessory items to match the basic probe station:

System Configuration up to 3 GHz

- Probe card holders
- Video systems
- Laser Cutters
- Higher powered objectives

System Configuration up to 40 GHz

All items listed above plus:

- "DC" manipulators and probes to power device (if not done by probe card)

Smith Chart image captured from an Agilent network analyzer.