**Probe Ranger Circuit Board Tests**

The **Probe Ranger** empowers board-level electrical testing of interconnections and devices with precision probe positioning and contacting over large PCB areas.

**Use Probe Rangers to test:**
- Differential & Single-Ended Devices
- Scattering Parameters
- Time-Domain Reflectometry
- Live Signals
- Eye Patterns
- Signal Jitter
- Interconnect Impedance
- Interconnect Total Loss
- Interconnect Delay
- Differential Delay Skew
- Differential Mode Conversion
- SMT Components
- Capacitor ESL and ESR
- Pad Admittance
- Via Impedance

**Order Worksheet**

Complete worksheet then visit www.ccnlabs.com/contact to request quotation, or to complete online RFQ form.

**Maximum board size?**
- Order PR1200 for 10in x 12in (257mm x 304mm)
- Order PR1800 for 16in x 24in (406mm x 610mm)
- Order PR2400 for 22in x 24in (559mm x 610mm)

**Differential channels or 4-port devices?**
- Order Option 4P Four Positioners

**25 GHz circuit probes?**
- Order FP25 FastProbes

**Components requiring 2 inch rail clearance?**
- Order XNTD 2in (50.8mm) Rail Height Extender Kit

**High-definition or high-magnification USB microscope?**
- Order DinoLite AM4113T or AM4113TL
- Order LVMNT Low-Vibration Microscope Mount

**Testing small wafers or PCB coupons?**
- Order VAC01 Vacuum Chuck 2.75in x 2.75in (70mm x 70mm)

Visit [www.ccnlabs.com](http://www.ccnlabs.com) to see videos of our products in action.
**Probe Ranger PR1200 Standard Specifications**

- **Maximum Board Area**: 12in x 10.1in (305mm x 257mm)
- **Sliding Rail Gantries**: 2 assemblies with locking roller-bearing travelers
- **USB Microscope Cameras**: 2 Dino-Lite AM2011 with gooseneck holders
- **Circuit Board Clamps**: Set of 4 with hardware to match Base
- **XYZ Probe Positioners**: 2 micropositioners with brackets & rail mounts
- **Micropositioner Travel**: 0.375in (9.5mm) in X, Y, and Z directions
- **Probe Tip Vertical Range**: 4.25in (108mm) using adjustable probe bracket
- **Probe Mount**: Standard 3-hole microprobe mount, 3x 8-32
- **Sliding Rail Clearance**: 0.75in (19mm) base to rail
- **Micropositioner Rotation**: ±50° for fixed probes on 3-hole mount
- **Probe Rotation**: 90° for probes using 1-hole mount as pivot
- **Dimensions**: 12in x 12in x 6.5 in (305mm x 305mm x 165mm)
- **Net Weight**: 9.6 lbs (4.4 kg)

**Probe Ranger PR1200 Options and Add-Ons**

- **4P**: Four XYZ Probe Positioners
- **71**: Onsite Installation and Training
- **81**: Maintenance & Support, 3-years
- **FP25**: FastProbe, 25 GHz circuit board probe
- **XTND**: Rail Height Extender Kit, 2in (50.8)
- **AD4113T**: High-Mag HD Microscope with Dimensional Measurements
- **AD4113TL**: HD Microscope with Dimensional Measurements
- **LVMNT**: Low-Vibration Microscope Mount
- **VAC01**: Vacuum Chuck Coupon Holder, 2.75in x 2.75in (70mm x 70mm)
- **SPQBN**: Teledyne LeCroy SPARQ, B Bandwidth, N Ports

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**Make reliable and repeatable high-frequency measurements**

Learn more at [www.ccnlabs.com](http://www.ccnlabs.com)
View probe touch-down with USB microscope cameras

Use CCN’s FastProbes & most third-party microprobes

Clamp and hold PCBs above surface of base

Make quick Y-position changes on sliding rail

Avoid vibration issues with low and heavy base

Make final and precise probe adjustments with XYZ Micropositioners

Rotate probes and micropositioners to accommodate pad angles

Adjust planarity and starting height (Z) with sliding Probe Bracket

“Fly” probe over large board area using gantry on roller-bearings

Reduce ESD damage with provided grounding cables
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