# REL-6100/4800 Probe Stations

# **Facility Planning Guide**



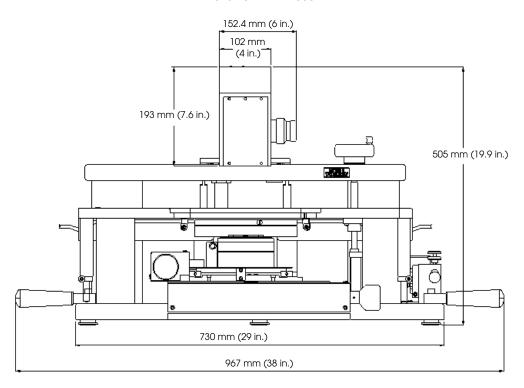
This guide contains information to help prepare your facility for the arrival of your REL-6100 or REL-4800 probe station.

- The REL-6100 offers a programmable x-/y- stage, chuck theta, and z-axis
- The REL-4800 offers manual controls with unmovable chuck z-motion.

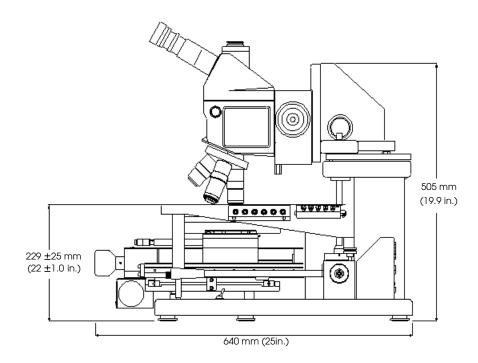
# **Probe Station Requirements**

Vacuum	Vacuum	400mm (15 inches) of mercury minimum
		<ul> <li>Minimum vacuum required: 3.4 liters/minute (0.12 SCFM)</li> </ul>
	Vacuum connection	3.175 mm (0.125-inch) I.D. polyurethane tubing
		2.4 m (8 feet) provided
Air for Platen Lift Assist	Pressure	• 5.5 - 8.6 MPa (55 - 125 psi)
	Available Flow	0.7 liters/minute (0.025 SCFM) minimum
	Quality	Oil-free, clean, dry, filtered (coalescing air filter recommended)
	Connection	6.35 mm (0.25-inch) O.D. plastic tubing
		• 3.0 m (10 feet) provided
Power	Outlets	- Up to four additional power outlets are available depending on the configuration and are rated at 115 V / 230 V for accessories.
	Power requirements	Vacuum pump 1 A / 0.5 A
	for accessories	<ul> <li>Air compressor (platen lift assist) 3 A / 1.5 A</li> </ul>
		<ul> <li>Video camera 0.5 A / 0.25 A</li> </ul>
		Video monitor 2.5 A / 1.25 A
		<ul><li>Laser 6 A / 3 A</li><li>Laser illuminator 3 A / 1.5 A</li></ul>
		Microscope illuminator 2.5 A / 1.25 A
		• Computer 3 A / 1.5 A
		Computer monitor 2.5 A / 1.25 A
Environmental Conditions	Operating	Indoors only
	Temperature	• 23°C ± 3°C
	Humidity	• 40% ± 20%
Additional	Workbench	Size: 1.2 m (4 feet) wide x 0.8 m (2.5 feet) deep minimum
Equipment		Capacity: 230 kg (500-pound) minimum
Dimensions	Station with	• 736.5 mm/29 in. (W) x 635 mm/25 in. (D) x 533.4 mm/21 in. (H)
	microscope	<ul> <li>Height will increase by 254 mm/10 in. with the addition of a laser and video camera</li> </ul>
	Laser Control Box	<ul> <li>254 mm/10 in. (W) x 304 mm/12 in. (D) x 203 mm/8 in. (H)</li> </ul>
	Video Monitor	• 508 mm/20 in. (W) x 508 mm/20 in. (D) x 508 mm/20 in. (H)
	ECX-56 Control Box	• 254 mm/10 in. (W) x 304 mm/12 in. (D) x 203 mm/8 in. (H)
	Computer	• 177 mm/7 in. (W) x 508 mm/20 in. (D) x 330 mm/13 in. (H)
	Computer Monitor	• 432 mm/17 in. (W) x 508 mm/20 in. (D) x 457 mm/18 in. (H)
	Joystick	• 127 mm/5 in. (W) x 203 mm/8 in. (D) x 102 mm/4 in. (H)
	Illuminator	• 210 mm/8.25 in. (W) x 241 mm/9.5 in. (D) x 10 mm/4.35 in. (H)
Weight	REL 4800	• 118 kg (260-pound)
	REL 6100	• 136 kg (300-pound)
	Lifting requirements	To avoid personal injury and/or damage to the station, four (4) people are required to lift the probe station onto the table (handles should be removed after placement). Note that the weight is not distributed evenly between all four corners of the station. The rear of the station is heavier than the front.
Shipping Dimensions	Crate for R48 or R61	• 902 mm/35.5 in. (W) x 1066 mm/42 in. (D) x 761 mm/30 in. (H)

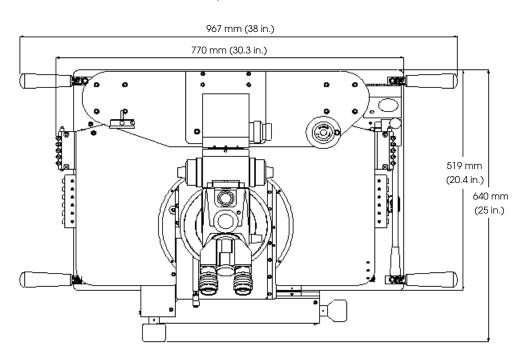
## Front view REL-4800



Side view REL-4800



### Top view REL-4800



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