RC-27NE Series 20 chambers

Narrow Bath Chamber with Field Stimulation



- Designed for field stimulation studies
- Rectangular open-bath chamber
- Narrow bath
- Accommodates tissue or brain slice specimens
- Applications include patch clamp and physiological measurements on cultured cells and tissue preparations

The RC-27NE recording chamber is a modified version of the RC-27 with a narrower bath and smaller volume designed for applications requiring electric field stimulation. Laminar solution flow is more stable in this chamber than in the wider RC-27 chamber.

The working specimen area is 28×8 mm and there are inclined surfaces on both sides (from 2.0 mm to 3.1 mm height). The low profile design and inclined surfaces permits good electrode access to the specimen area.

The chamber is supplied with a pair of platinum wire electrodes installed along the long parallel sides of the bath. Electrode leads are approximately 16 cm long and terminate with 1 mm diameter pins.

The RC-27N chamber requires a platform (P-6, PH-6, or PM-6) and stage adapter to complete the assembly for mounting onto a microscope. The chamber body is manufactured from polycarbonate and the chamber floor is formed from a 24×50 mm coverslip.

Each chamber is supplied with a package of #1 thickness glass coverslips (CS-24/50, 24 x 50 mm, pkg. of 50) and 10 feet of PE-160 polyethylene tubing.

The SIU-102 is a bipolar stimulator designed for use with field stimulation chambers. This instrument features constant current and constant voltage modes, as well as bipolar, pulse, and DC modes. Optical coupling is used to electronically isolate the stimulator from the pulse source. Currents up to 100 mA and voltages up to 100 V are also supported. See page 247 for details.



RC-27NE shown in a PM-6 heated platform

Specifications

Material	Polycarbonate
Bath dimensions (L x W x H)	37 x 8 x 2 mm
Volume, by depth	305 μl/mm
Electrodes	Platinum wire, 15 cm cables with 1 mm pins
Bottom coverglass	24 x 50 mm
Input tubing (ID x OD)	1.14 x 1.57 mm (PE-160)
Aspirator coupling	1.67 mm (OD)

Order #	Model	Product
W4 64-0240	RC-27NE	Narrow Bath Recording Chamber with Field Stimulation
W4 64-0282	P-6	Platform, non-heated
W4 64-0289	PH-6	Platform, heated
W4 64-1527	PM-6	Platform, heated magnetic
Accessorie	s and Replac	cement Parts
W4 64-0755	PE-160/10	Polyethylene Tubing
W4 64-0709	CS-24/50	Coverslips, 24 x 50 mm