

# ADV500 Pressure Volume Control Unit

## Precision Pressure-Volume Measurements for Basic Science Research

### Scisense ADV500 Specifications

#### GENERAL FEATURES

Size: 3.1" (7.9 cm) h x 11.4" (29.0 cm) w x 7.9" (20.0 cm) d

#### POWER SUPPLY

Input: 100-250 VAC, 50-60 Hz

Connector: 5 pin Circular DIN

#### OPERATIONAL TECHNOLOGY

Solid-state pressure sensors, Admittance or Conductance Pressure Volume

#### CATHETER COMPATIBILITY

FTH- and FDH- Series Pressure and Pressure-Volume Catheters. Transonic Scisense Calibration Probes

#### CATHETER CONNECTOR

HDMI

#### PRESSURE AND VOLUME INPUTS

ADV500 accepts two pressure inputs from either two single sensor Catheters or one dual sensor Catheter. ADV500 accepts one volume input, coupled with pressure. There must be at least one Catheter plugged in to the main "Catheter" input.

#### ANALOG OUTPUT

Rear panel DB-15 (D-sub) female outputs:

- Number of output channels: 5
- Voltage range: -5 to +5 volts
- Pressure Output Range: -100 to +300 mmHg
- Pressure Output Resolution: 23 mV/mmHg
- Volume Output Range:
  - 0 - 150 uL mouse
  - 0 - 1500 uL rat
  - 0 - 4 mL rabbit
  - 0 - 300 mL large animal
- Phase Range: 0 - 20 degrees
- Magnitude Range:
  - 0 - 5000 uS mouse and rat
  - 0 - 15 mS rabbit
  - 0 - 50 mS large animal



# Pressure Volume Catheters Options & Ordering

## CHECKLIST FOR ORDERING AND CUSTOMIZING CATHETERS

1. Select Catheter size
  - 1.2F & 1.9F Rodent Catheters
  - 3.5F Mid-sized Animal Catheter
  - 5.0F & 7.0F Large Animal Catheters
2. Select single or VSL (1.2F & 1.9F only)
  - Single (1 spacing)
  - Variable Segment Length - VSL (4 spacings)
3. Specify Catheter length if not standard
  - 1.2F & 1.9F - 18" standard
  - 3.5F - 24" standard
  - 5.0F & 7.0F - 45" or 48" standard\*
4. Specify tip type
  - 1.2F, 1.9F & 3.5F - straight tip, closed lumen standard
  - 5.0F - straight or pigtail tip, closed lumen standard
  - 7.0F - straight or pigtail tip with open or closed lumen standard
  - Additional customization options available including curved or angled tips
5. Specify spacing between volume electrodes
  - See table at right for standard spacing options
  - Specify custom spacing in 1 mm increments
6. Select number of pressure sensors (5.0F & 7.0F only)
  - Single (1 sensor)
  - Dual (2 sensors)
7. Select carotid or apical approach for dual pressure sensors only (5.0F & 7.0F only)
  - Apical approach, aortic pressure sensor is at tip
  - Carotid approach, ventricular pressure/volume sensor is at tip
8. Select spacing between aortic sensor and last volume electrode (electrode 7) for dual pressure sensor only (5.0F & 7.0F only)
  - 30 mm or 50 mm standard
  - Specify custom spacing in 1 mm increments

\*Customization is subject to limitations, please contact your local sales representative or Transonic customer service for more information

\*\*45" length standard for FDH- series and 48" length standard for FTH- series

CATHETER	ELECTRODE SPACING
1.2F	3.5 mm
1.2F	4.0 mm
1.2F	4.5 mm
1.2F VSL	5, 6, 7 & 8 mm
1.9F	6 mm
1.9F	8 mm
1.9F	10 mm
1.9F VSL	6, 8, 10 & 12 mm
1.9F VSL	8, 10, 12 & 14 mm
1.9F VSL	8, 11, 14 & 17 mm
3.5F VSL	5, 8, 11 & 14 mm
3.5F VSL	8, 11, 14 & 17 mm
3.5F VSL	11, 14, 17 & 20 mm
5.0F VSL*	15, 20, 25 & 30 mm
5.0F VSL	20, 30, 40 & 50 mm
5.0F VSL*	35, 45, 55 & 65 mm
5.0F VSL*	50, 60, 70 & 80 mm
5.0F VSL*	70, 80, 90 & 100 mm
7.0F VSL*	30, 40, 50 & 60 mm
7.0F VSL	50, 60, 70 & 80 mm
7.0F VSL*	70, 80, 90 & 100 mm

\*Spacing standard with FDH- series only

