**DAM2 Drosophila Activity Monitor**
- 32 tubes, 5 or 7mm diameter
- Dual IR beams per tube
- Integrated on/off ambient light sensor
- Available models
  - DAM2 for 5mm tube = $485.
  - DAM2-7 for 7mm tube = $525.
  - DAM2-HS for high speed counting of flies pulled by vacuum = $600. (6 channels only, 5mm tubing)

**DAM5 Drosophila Activity Monitor**
- 32 tubes, 5mm diameter for *D. melanogaster*
- Single IR beam per tube
- Built-in clips hold tubes securely
- Available models
  - DAM5 for 5mm tube = $800.

**LAM10/16/25 Locomotor Activity Monitor**
- 32 tubes, 10, 16, or 25mm diameter
- 3 or 9 IR beams per tube (normal/high resolution)
- Available models
  - LAM10, LAM16, LAM25 = $875.
  - LAM10H, LAM16H, LAM25H = $1,175. (high res)
  - LAM10H-3, LAM16H-3, LAM25H-3 = $3200. 3-board stack monitors 3 axial positions per tube
- LAMVTS Vertical Tube Support plate = $75.

**MB5 MultiBeam Activity Monitor**
- 16 tubes, 5mm diameter
- 17 independent IR beams per tube detect activity along 51mm of tube length in 3mm zones
- Data storage rate up to 1 hz for all monitors
- Available models
  - MB5 = $1,550.
  - PSIU24 Power Supply Interface Unit = $350. supports 32 MB monitors, includes all cables
**DPM Drosophila Population Monitor**
- Single 25mm vial for group activity monitoring
- 3 IR beam sets monitor activity at 3 separate axial locations
- 15 beams per set robustly detect individual *d. melanogaster* walking on the tube walls
- Operates with horizontal or vertical vial
- Available models
  - DPM = $750. (includes 25x95mm glass shell vial)

**DEM Drosophila Eclosion Monitor**
- Counts falling flies after eclosion from pupae disk
- Solenoid tapper periodically dislodges new imagoes from disk and funnel surfaces
- Available models
  - DEM = $1,750. (includes funnel and pupae disk)
- Accessories:
  - FUN100 100mm funnel = $22.
  - PDSK Pupae disk = $18.

**LAM60 Locomotor Activity Monitor**
- 6 tubes, 60mm diameter
- 9 IR beams per tube
- Accommodates larger animals with full light penetration
- Available models
  - LAM60 = $925.

**DEnM Drosophila Environment Monitor**
- Measures incubator conditions alongside activity data for archival record
- Precision measurements verify incubator setpoints
- Temperature: 0-70C, +/- 0.1 degC
- Relative Humidity: 5-95%, +/- 2%
- Ambient Light: 0-2500 lux, +/- 5%
- Available models
  - DEnM = $450. (Temp, RH, Light)
  - DEnM-P = $450. (Barometric Pressure, in Hg)
PSIU9 Power Supply Interface Unit
- Connects data collection computer to activity monitors via USB computer port. One required per system; connects up to 120 monitors.
- Includes PS9-1 AC power supply, AC line cord, USB cable, and 10’ extension data cable with coupler
- Available models
  • PSIU9 = $350.
  • PS9-1 AC power supply (9VDC, 1A output) = $30.
  • PS9-3 AC power supply (9VDC, 3A output) = $40.

LC4 Light Controller
- Programmable on/off switching of 4 AC outlets
- Pulse duration from 1 second to 99 hours
- Single, periodic, or random pulse repetition
- Incubator lighting control
- Vortexer pulsing for sleep deprivation
- 3A, 240VAC max for each outlet, 50/60 hz
- Available models
  • LC4 = $750.

MAN2 Gas Distribution Manifold
- Facilitates gas flow thru DAM2 5mm tubes
- Single gas inlet for all tubes
- Tubes snap into manifold via o-ring seals
- Exit holes in plastic tubes allow gas exit near cap
- Available models
  • MAN2 for 5mm tube = $400.
  • PPT5x65D2 (50 drilled PC tubes, 2x.030”) = $50.

SwM Switch Monitor
- Captures locomotor data from activity wheels or other custom monitoring apparatus
- 32 external switch inputs + switch common via pluggable terminal blocks
- Accepts mechanical, magnetic, or electronic switch inputs at up to 5hz repetition rate
- Available models
  • SwM = $750.
Vortexer Mounting Plate
- Fits Talboys multi-tube vortexer, available directly from Troemner or VWR / Fisher
- Securely holds up to 4 DAM2 activity monitors during shake cycle
- Compatible with LC4 Light Controller for precision computerized sleep deprivation
- Includes all necessary mounting hardware
- Available models
  • VMP = $575. (does not include vortexer)

DFM Drosophila Funnel Monitor
- Counts falling flies under inibriometer column
- 75mm funnel diameter
- 8mm OD funnel neck
- Available models
  • DFM = $800. (includes funnel)

Additional Products
- DPR 6  Drosophila Rotarod, 6 tubes (25 mm diameter) with spin motor = $5,200.
- HAB 3  4 x 4” Drosophila Habitat with glass cover plate = $180.
**Monitor Tubes** (outside diameter x length, mm)
- PGT5x65 Pyrex Glass (100) = $65.
- PPT5x65 Polycarbonate (100) = $15.
  - PPT5x65 Polycarbonate (1000) = $120.
  - PPT5x65 Polycarbonate (7500) = $675.
- PGT5x80 Pyrex Glass (100) = $70.
- PPT5x80 Polycarbonate (100) = $16.
- PGT7x65 Pyrex Glass (100) = $80.
- PGT10x100 Pyrex Glass (100) = $90.
- PGT16x100 Pyrex Glass (43) = $45.
  - PGT16x100 Pyrex Glass (250) = $220.
- PGT25x125 Pyrex Glass (93) = $130.
- PGT60x300 Pyrex Glass (1) = $50.

Tubes are open on both ends; glass are fire glazed.

**Tube Caps**
- CAP5-Black (100) = $8. (fits 5mm tube)
- CAP5-Yellow (100) = $15.
- CAP7-Black (100) = $8.
- CAP10-Black (100) = $9.
- CAP16-Black (100) = $10.
- CAP25-Black (100) = $15.

Black caps are vinyl plastic, yellow are PVC plastic. Both may be cut to length with scissors and drilled for ventilation.

**Cables and Connectors**
- SPLT5  5-way splitter = $10.
- SPLT8-6  8-way splitter for multibeam = $80.
- CPLR Coupler = $4.
- CAB2  2’ monitor cable = $3.
- CAB10  10’ extension cable = $6.
- CAB2-6  2’ monitor cable, 6 cond for MB = $4.
- CAB10-6  10’ cable, 6 cond for MB = $7.

All monitors use standard North American 4 or 6 conductor telephone cable and connectors for power and data transmission.
Ordering Notes

Basic System
A basic system will include the PSIU9 with PS9-1 Power Supply, one or more activity monitors, and a customer-supplied Macintosh or Windows PC with USB port for data collection and storage.

Tubes and Caps
Unless otherwise noted, monitors do not include tubes or caps, which may be ordered separately.

Wiring Accessories
All systems are shipped with appropriate DAMSystem network wiring accessories, including cables, couplers, and 5-way splitters. Monitor cables are 50cm (2’) long and extension cables are 3m (10’) long unless otherwise specified.

Monitor Numbers
All units are identified by a unique numeric address in the range 1:120 which must be specified at the time of order. Addresses should not be duplicated within a system, and will be assigned consecutively from #1 unless otherwise specified.

Software
The DAMSystem data acquisition software package and PSIU9 USB driver are available for download at no charge from the TriKinetics web site, www.trikinetics.com.

Modifications
Custom variants of any and all of the above-listed products and accessories are available on request.

Foreign Orders
Overseas shipment is available for any item. Foreign customers should be advised that VAT or other import duty will likely be assessed on arrival, and may slow delivery if preparations are not made in advance.

Suggestions
Comments on product performance, and suggestions for product improvement, are particularly important to us, and always welcome.

Warranty and Repair
Defective units will be repaired at no charge.

Specifications
All specifications are nominal, and subject to change without notice to improve product reliability or performance. No liability is assumed for loss of data or consequential damages, and all trademarks are the property of their respective owners.

Acknowledgments
These units were developed with the continuing assistance and support of scientists in many laboratories around the world, and this support is gratefully acknowledged. We are especially indebted to Prof. Michael Rosbash and Prof. Jeffrey Hall at Brandeis University for their cooperation and assistance in the early days.