


# The *Hemotek* 6W1 Membrane Feeding System for blood-sucking insects

<b>The 6W1 system</b>	
<p>The 6W1 system includes 1 PS6 power unit and 6 FU1 feeders. The system removes the need for animal host feeding for rearing many insect species including <i>Aedes</i> and <i>Anopheles</i> mosquitoes. Many laboratories which are currently authorised to use animals for feeding insects are switching to the Hemotek system as a preferred method using either blood or formulated meal. The 6W1 system is also a valuable research tool with a wide range of applications. It is possible to modify the meal by the introduction of chemicals or infectious agents and the temperature can be set and maintained precisely.</p>	
<b>FU1 feeders</b>	<b>The PS6 power unit</b>
<p>The durable, plastic body of the FU1 Feeder houses an accurate, electronic temperature control and heater and is fitted with 1 metre of cable which plugs into the front panel of the PS6 power unit: an L.E.D. indicates connection. The feeder has a meal reservoir which is removable for easy cleaning and preparation. The meal reservoir can be autoclaved if necessary.</p>	<p>The PS6 Power Unit is portable and can be configured at our factory for use on the mains power supply of any country. The PS6 will simultaneously power up to 6 feeders which plug into sockets on the front panel. The PS6 is supplied with a 2 metre power cable to suit the country of destination. Should the cable need extending to reach cages distant from the mains socket, then a mains extension can be used. (2 metre jumper cord set extensions are available). The low voltage cords to the FU1 feeders should not be extended.</p>
<b>Operating temperature</b>	<b>Preparing the meal reservoir</b>
<p>The operating temperature of each feeder can be adjusted to suit the preferences of different insect species: this precise control is an important feature for many experimental procedures. Adjustment is made by means of a setting screw located in the top of the feeder. An electronic thermometer (not included) with a resolution of 0.1 C and which is fitted with a miniature wandering probe is ideal for measuring the temperature during this procedure.</p>	<p>A square of feeding membrane measuring approximately 6 x 6 cm is stretched over the aperture of the meal reservoir and secured by an 'O' ring. The pleats and creases are removed from the edge by carefully pulling the corners. When the correct tension has been attained, the surplus membrane can be trimmed with scissors. The reservoir is held so that the membrane is unsupported and it is filled with either blood or a formulated protein meal through one of the two ports using a transfer pipette or syringe. The filling plugs are then sealed with plastic plugs. The capacity of the reservoir is approximately 5 ml. and the feeding area of membrane is approximately 10 sq.cm. (sufficient area for 50 female mosquitoes to feed together). The prepared reservoir is attached to the feeder by screwing it onto the stud on the heat transfer plate at the bottom of the feeder. The feeder can now be plugged into the PS6 Power Unit and placed on the insect cage. The feeder has been designed so that it will stand on top of the cage to enable the insects to feed through the mesh of the cage; other arrangements are possible.</p>
<b>Feeding membrane</b>	
<p>Synthetic or natural membranes can be used with FU1 feeders. The choice will depend on species preference and research criteria. The collagen membrane provided with the system is easy to prepare and is ideal for most species.</p>	
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