Clear views of cardiac function

Philips Hemodynamic Extension with PiCCO®

The Hemodynamic Extension is designed to work with the Philips Multi-Measurement Module (MMS) and Philips IntelliVue X2 and includes PiCCO® technology for continuous cardiac output monitoring through arterial pulse contour analysis and intermittent measurement through transpulmonary thermodilution. The extension also supports traditional cardiac output monitoring from a right heart catheter and provides ports for invasive blood pressure and temperature, and an additional invasive blood pressure or temperature. A major advantage of the transpulmonary method is that it is independent of ventilator and respiratory cycles, enabling PiCCO to give consistent, reproducible results for a clearer view of patient status.

PiCCO is a registered trademark of PULSION Medical Systems AG.

Key advantages

- Lightweight, rugged, all-in-one convenience for bedside and transport
- Allows real-time, less invasive, continuous cardiac output monitoring as well as traditional right heart thermodilution cardiac output measurements
- Combined with the MMS or IntelliVue X2 provides comprehensive measurements in a single package
Travels easily with the patient
This compact and reliable plug-and-play unit piggybacks on the MMS or IntelliVue X2. At bedside, the MMS or X2/Extension combination can be connected to Philips patient monitors. During transport, it stores up to eight hours of patient trend data, as well as calibration and alarm settings.

Real-time continuous cardiac output monitoring
Right heart thermodilution is commonly considered the clinical “gold standard” for determining cardiac output. The Hemodynamic Extension displays the thermodilution curve and cardiac output, cardiac index, and blood temperature as numerics. PiCCO technology provides clinicians with the following clinical measurements, many of which can be displayed as absolute or indexed values:

Via pulse contour analysis
- Continuous cardiac output (CCO)
- Stroke volume (SV)
- Stroke volume variation (SVV)
- Systemic vascular resistance (SVR)
- Index of left ventricular contractility

Via transpulmonary thermodilution
- Transpulmonary cardiac output (C.O.)
- Intrathoracic blood volume (ITBV)
- Extravascular lung water (EVLW)
- Cardiac function index (CFI)\(^1\)
- RL Shunt\(^2\)

Right heart catheter thermodilution provides intermittent measurement; PiCCO* provides continuous cardiac output monitoring.

Compatibility
The Hemodynamic Extension with PiCCO can be used with these Philips patient monitors:
- IntelliVue M800
- IntelliVue MP series\(^3\)
- IntelliVue X2\(^4\)

* Please ask your sales representative for details on compatibility.

Ordering information

<table>
<thead>
<tr>
<th>M3012A</th>
<th>Hemodynamic Extension offering one IBP, one Temp and one Press/Temp</th>
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<tbody>
<tr>
<td>M3012A</td>
<td>Hemodynamic Extension opt. C05 offering one IBP, one Temp, one Press/Temp and Right Heart Cardiac Output</td>
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<tr>
<td>M3012A</td>
<td>Hemodynamic Extension opt. C10 offering one IBP, one Temp, one Press/Temp and Cardiac Output and PiCCO</td>
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\(^1\) PiCCO is not distributed in the U.S. and Canada.
\(^2\) Not available in clinical environments under FDA control.
\(^3\) Not including IntelliVue MPS.
\(^4\) The Hemodynamic Extension will only function when the monitor is connected to an external power source.

Please visit www.philips.com/HemodynamicExtensionPicco