Clinical Measurements

Hemodynamic Extension with PiCCO* for added capability with the Multi-Measurement Server

The Hemodynamic Extension is designed to work with the Philips Multi-Measurement Server (MMS) 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.

All-in-one convenience for the bedside and transport
The Hemodynamic Extension is a lightweight, rugged, plug-and-play unit that piggybacks on the Multi-Measurement Server and travels easily with a patient. At the bedside, the MMS/Extension combination can be connected to IntelliVue 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
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 (EVIW)**
- Cardiac function index (CFI)

* PiCCO not distributed in the USA.

** Not available in clinical environments under FDA control.
Right heart catheter thermodilution

Right heart thermodilution is 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.

Comprehensive measurements in a single package

The combination of the MMS and Hemodynamic Extension provides all of the following measurements in a compact, rugged unit:

- ECG
- Respiration
- SpO₂
- NIBP
- Invasive pressure
- Temperature
- Cardiac output

Traditional right heart thermodilution

Philips is committed to providing best-in-class standard clinical measurements as well as innovative measurements to support clinicians’ decisions at the patient’s side.

Philips continues to build on its proven measurement expertise by:

- Maintaining and advancing the performance of existing, widely used standard-of-care measurements
- Investing heavily in research, development, and clinical validation of new, innovative parameters and algorithms
- Working with strategic partners to integrate next-generation measurements and technologies
- Providing interfaces to more than 100 third-party specialty measurement devices through the Philips VueLink module

Philips Commitment to Measurement Technologies

Philips Medical Systems is part of Royal Philips Electronics

References


