



Introduction

The Wattius wBMS-HX is a Battery Management System product family designed for applications up to **1.500 V** and provides reinforced isolation for all external interfaces according to IEC60664.

The wBMS-HX CMU16 is the 16-cell Cell Monitoring Unit of the HX family, compatible with both wBMS-MX and wBMS-HX BMUs.

The wBMS-HX products feature direct compliance with IEC62619 and is pre-certified for Functional Safety, with a Compliance Report for ISO13849:1 Performance Level D issued by a certified third-party testing entity.

Technical Specifications

Cell measurements (voltage & temperature)	Multiple cell chemistry. Extended internal redundancy and hardware integrity diagnostics. Open wire detection.
Cell voltage	5 - 16 cells. 0,1 - 4,5 Vdc. ± 1,8 mV cell voltage max total error.
Cell temperature	Up to 5 channels. Configurable NTC. ± 1 °C cell temperature max total error.
Balancing	Configurable autonomous passive balancing strategy. 24 $\boldsymbol{\Omega}$ per channel.
Isolation	1.500 V reinforced isolation (IEC60664).
Consumption	Active: < 10 mA Sleep: < 10 µA
Operating temperature range	-40 to +85 ^o C
Dimensions	L119 x W95 x H18 mm. 4x M4 mounting holes.
Connectors	Cell voltages and temperatures: Molex MicroFit. CMU-link communications: Molex MicroFit and/or RJ45.
Compliance	Functional Safety ISO13849:1 PLd (Compliance Report from certified third-party available). Fully compatible with IEC62619, including 2023/1542/EU. EMC: 2024/30/EU RoHS: 2011/65/EU

