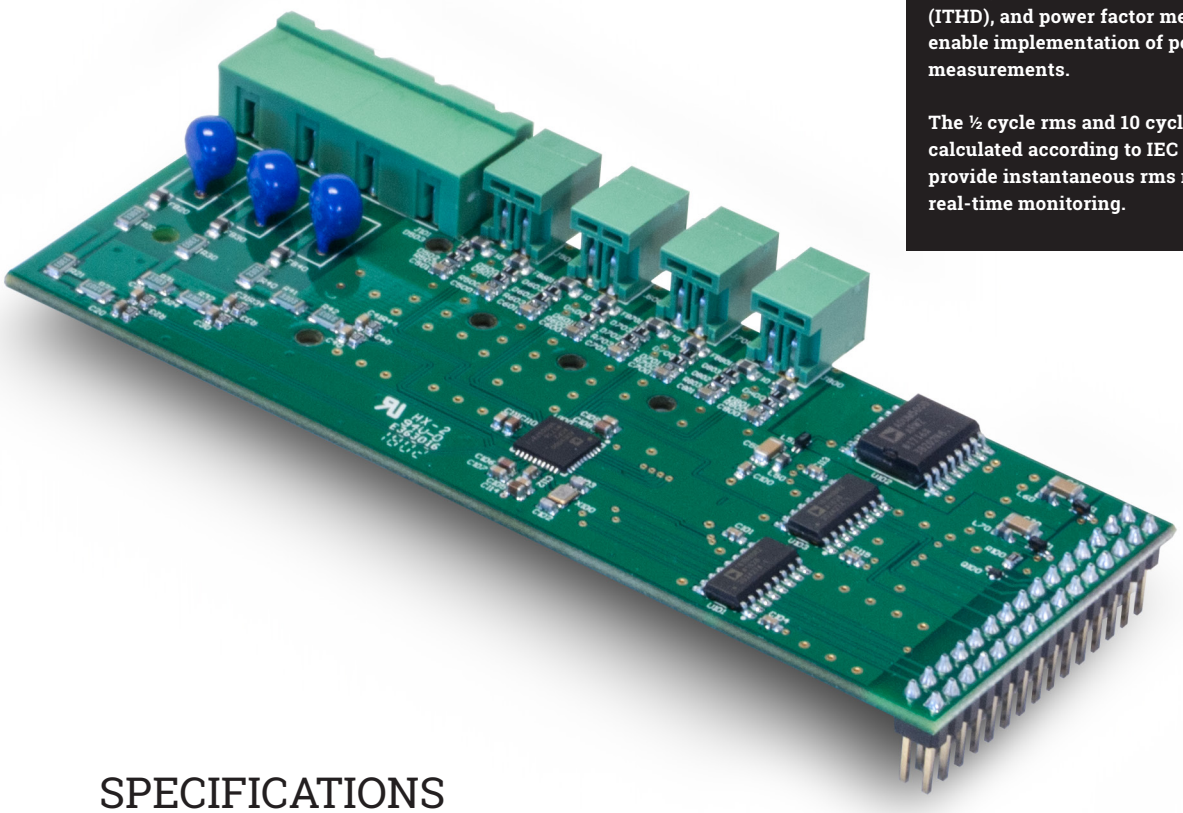
High performance multiphase

Energy and Power Quality meter

A fairly unique gateway feature is our highly accurate multiphase energy and power quality monitoring expansion card. Superior analog performance and a digital signal processing (DSP) core enable accurate energy monitoring over a wide dynamic range. An integrated high end reference ensures low drift over temperature with a combined drift of less than ±25 ppm/°C maximum.

The Energy and Power Quality meter expansion card offers complete power monitoring capability by providing total, as well as fundamental measurements on rms, active, reactive, and apparent powers and energies. Advanced features such as dip and swell monitoring, frequency, phase angle, voltage total harmonic distortion (VTHD), current total harmonic distortion (ITHD), and power factor measurements enable implementation of power quality measurements.

The ½ cycle rms and 10 cycle rms/12 cycle rms, calculated according to IEC 61000-4-30 Class S, provide instantaneous rms measurements for real-time monitoring.



SPECIFICATIONS

Voltage measuring	3 x 400V RMS voltage meter
Current measuring	4 phase, range depending on sensor
Line frequency measuring	Per phase
Advanced measurements	Total and fundamental IRMS & VRMS Total harmonic distortion Power factor
Active energy standards	IEC 62053-21 and IEC 62053-22; EN50470-3; OIML R46; and ANSI C12.20
Reactive energy standards	IEC 62053-23, IEC62053-24
Zero crossing, zero-crossing time-out	Yes
Phase angle measurements	Yes
Supported sensors	CTs and Rogowski coil (di/dt) sensors
Flexible waveform buffer	128 points per line cycle for ease of external harmonic analysis (IEC 61000-4-7)
Accuracy	±3°C accuracy from −25°C to +65°C

calculus

Measure it. Improve it.

KEMPENSEWEG 12 | BE-3690 ZUTENDAAL | T +32 89 696 983
INFO@CALCULUS.ENERGY | WWW.CALCULUS.ENERGY
CALCULUS (EYWA) BVBA | BTW BE 0670 612 171 | IBAN BE33 7310 4316 2446