



# AC Power Analysis Modules

Capture and analysis of AC powered devices

Quarch  
Data Sheet



# AC Power Analysis Modules

Capture and analysis of AC powered devices, from small appliances to large 3-phase supplies



## Highlights

- ▮ High power mains analysis (power, phase, frequency, power factors and much more)
- ▮ Oscilloscope function allows accurate power recording
- ▮ Long term recording and full access to raw data
- ▮ Low current measurements, accurate at mA range
- ▮ Plug-and-play setup
- ▮ Simple automation options

## Use Cases

<b>Characterisation</b>	Power consumption monitoring over long periods and different use cases
<b>Power Quality</b>	See power up ramps, voltage noise and unusual power events
<b>Automation</b>	Simple scripted control for complex unsupervised testing





## Measurement

Voltage and Current are simultaneously sampled, to give the most accurate possible power measurement. 8,000 samples per second gives you a detailed view of the full AC waveform.

Synthetic channels provide you with real-time power factors, RMS measurements, frequency, phase and much more.

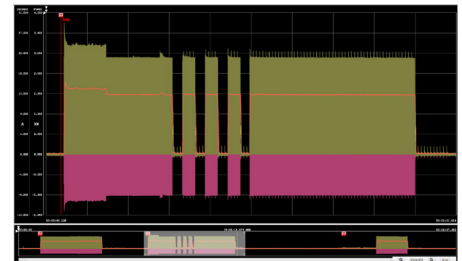
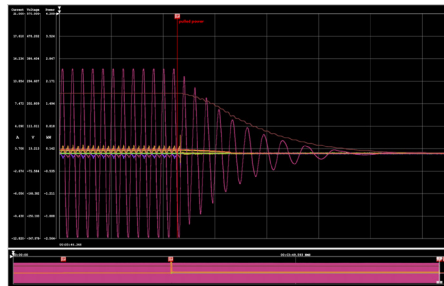
Long term recording allows hours or even days of capture at high resolution. This is an order of magnitude more than is available on most alternative capture options.

Quarch Power Studio allows you to add custom channels, annotations and comments. This provides you with a full overview of the performance of your product. Full access to raw data for your own processing is provided.

## Control and Automation

Basic capture in Power Studio can be setup and run in seconds. USB and LAN control options allow for both bench testing and remote lab environments.

Our Python API allows automation of Power Studio, or direct access to the PAM to capture raw data



Application notes are available to help you get started quickly

## Supplied Parts

**3 Phase AC PAM** - 2 meter USB cable, PoE Injector, mains cable

## Also Required

**Downloads** - Our website contains many useful downloads to help you get started: [www.quarch.com](http://www.quarch.com)

- USB Drivers
- Technical Manuals
- Quick Start Guides
- Example Scripts
- Power Studio Application





## Support

Quarch provides direct support to all customers, regardless of the sales channel you use to purchase our equipment. We are available over email, or by phone during UK office hours. Our regional partners are also trained to handle many of the most common questions you might have.

Our support is normally free, though there may be charges if you require on-site training or significant development work. Please contact us if there is anything we can do to help.

Please see our website for access to drivers, technical manuals, quick-start guides, example scripts and more

Email	Phone	Web
support@quarch.com	+44 1343 508 140	www.quarch.com/support

## Ordering

Quarch have a network of specialist partners around the world. Please contact our partner in your region if you require a quote.

We recommend evaluating our products before purchase, so our partners will be happy to arrange a free evaluation unit.

## Regional Contact Details

### North America

SerialCables LLC  
Colorado, California



Web [www.serialcables.com](http://www.serialcables.com)

### China, Hong Kong

Saniffer  
Hong Kong



Web [www.saniffer.com](http://www.saniffer.com)

### India

ESA Group  
Bangalore



Web [www.esaindia.com](http://www.esaindia.com)

### Taiwan

Reeper Technology  
Taipei



Web [www.reeper.com.tw/](http://www.reeper.com.tw/)

### Israel

EMY-Tech  
Misgav



Web [www.emy-tech.com](http://www.emy-tech.com)

### Europe and ROW

Quarch Technology  
Scotland, UK



Web [www.quarch.com](http://www.quarch.com)

### South Korea

JWill Technology  
Seoul



Web [www.jwill.co.kr](http://www.jwill.co.kr)

### UK & Ireland

GCH Services  
Slough



Web [www.gch-services.com](http://www.gch-services.com)





## Products Versions

Product Code	Product Options
<b>QTLXXXX</b>	<b>QTL2582</b> 16A 3-Phase Power Analysis Module <b>QTL2789</b> 32A 3-Phase Power Analysis Module <b>QTL2751</b> 63A 3-Phase Power Analysis Module <b>QTL2843</b> IEC Power Analysis Module

## Standalone products

Product Code	Description
QTL2582	16A 3-Phase Power Analysis Module Standalone tester for 3-phase mains
QTL2789	32A 3-Phase Power Analysis Module Standalone tester for 3-phase mains
QTL2751	63A 3-Phase Power Analysis Module Standalone tester for 3-phase mains
QTL2843	IEC Power Analysis Module Single Phase tester 3x C14 outputs, 16A max (13A max at 240v)





## Technical Information

Control Characteristics	QTL2582	QTL2789	QTL2571	QTL2843
Input Voltage	PoE			PoE or 12v
Form Factor	Bench Unit			
Control Ports	USB, LAN			

## Measurement Information

Measurement Accuracy	QTL2582	QTL2789	QTL2571	QTL2843
Mains Connectors	16a 3p+n+e 415V	32A 3P+N+E 415V	63A 3P+N+E 415V	C14
Sampling Rate	8 KHz			
Voltage Range	+/- 495.5v pp (per phase)			+/- 495.5v pp
Current Range (RMS)	16A Max	32A Max	63A Max	16A Max (at 110v)
Current Calibration Accuracy	+/- (1% 30mA)			+/- (1% 20mA)
Voltage Calibration Accuracy	+/- (1% + 250mV)			

Monitored Rails	QTL2582	QTL2789	QTL2571	
Hardware Channels	Voltage and current for 3 phases + neutral current			Voltage and current for each of the 3 output ports
Software Synthetic Channels	Frequency, phase, power factor, RMS, real/apparent power, total power (Synthetic channels can be user configured)			



