



eyePower MDU

The future of power distribution



- ◆ THE HIGHEST RESOLUTION MONITORING MDU AVAILABLE
- ◆ UNRIVALLED ACCESS TO MAINS POWER INFORMATION
- ◆ INTERNAL MACRO LANGUAGE FOR CUSTOM SEQUENCE PROGRAMMING
- ◆ REMOTE CONTROL OVER TCP, WEB BROWSER AND MULTIDROP SERIAL
- ◆ FULLY COMPLIANT WITH MODERN ELECTRICAL SAFETY STANDARDS
- ◆ ONE OR TWO 20 AMP POWERCON INLETS AND 14 C13 IEC OUTLETS

Intelligent control and monitoring of supply and connected equipment power

Bryant Unlimited have been manufacturing intelligent mains distribution units since the 1990s and the eyePower MDU is our latest design, representing years of development and listening to user needs. We are extremely proud of the units' capabilities and the high resolution of measurements that are made. The units also perform various useful measurements that are not offered by the low resolution competition, allowing a much higher standard of monitoring and status reporting. Importantly we are committed to adding new facilities as required in firmware, the platform is very stable with control and monitoring deliberately performed by different microcontrollers.

Features:

- ◆ 20A powerCON inlets, either single or dual auto-changeover.
- ◆ 14 x 10A IEC outlets, individually controlled and monitored.
- ◆ Advanced monitoring of mains supply parameters.
- ◆ Serial* and Ethernet† connections for monitoring and control.
- ◆ 1-Wire® interface allows multiple temperature/humidity sensors.
- ◆ GPI in/out for macro triggers and tallies.
- ◆ Comprehensive internal macro language for sequence programming.
- ◆ OLED display for local monitoring.
- ◆ Energy efficient design using modern techniques.
- ◆ Full protocol available for interface to third party NMS (Dataminer, Colledia etc.)

10	03	00	GPI Disable
11	D2	1A	Set on/off switch on interrupt address 1A
12	D3	2A	Set on/off switch off interrupt address 2A
13	04	2A	GPI Enable
14	00	00	Stop
15	00	00	Stop
16	00	00	Stop
17	00	00	Stop
18	00	00	Stop
19	00	00	Stop
1A	40	00	Turn on outlet 1 after 0.0 seconds, skip if already on
1B	41	00	Turn on outlet 2 after 0.0 seconds, skip if already on
1C	42	00	Turn on outlet 3 after 0.0 seconds, skip if already on
1D	43	00	Turn on outlet 4 after 0.0 seconds, skip if already on
1E	44	32	Turn on outlet 5 after 5.0 seconds, skip if already on
1F	45	05	Turn on outlet 6 after 0.5 seconds, skip if already on

Figure 1: Macro Editing

* Serial port fitted to all but base models. † Ethernet connectivity is available as an option.

1U, 14 IEC outlet intelligent Mains Distribution Unit, 20A powerCON single inlet or dual inlet with auto-changeover, comprehensive control and monitoring of inlet and outlet data over multidrop serial or optional Ethernet interface with PoE, 1-Wire[®] sensors for environmental monitoring.

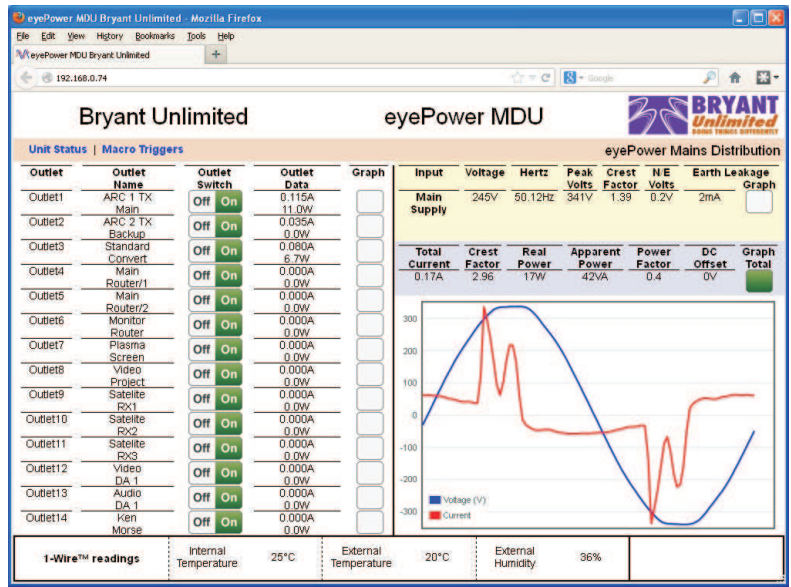
eyePower Web Browser Interface

This image displays the main page of eyePower's embedded Web Browser Interface.

The left side offers control and monitoring of individual channels, which the user can name. Outlets may be turned on and off, with accurate monitoring of individual current and power. eyePower offers an innovative graph of current draw.

Top right details information about the incoming single or dual supplies. Accurate measurements of voltage and frequency are joined by eyePower's earth leakage and Neutral/Earth tests, invaluable in real world installations.

The blue section details the total current drawn, real and apparent power, crest factor and power factor. Another eyePower first is measuring DC on the mains, which can adversely affect equipment.



The Graph section displays voltage and current over one cycle of mains. This can be used to analyse the state of equipment connected to eyePower. RMS voltage measurements do not convey the problems as can be seen with this waveform display. Failing power supplies can develop strange current waveforms while drawing the same power and operating normally.

All of the above data is available to third party software through the serial port or 100Base-T Ethernet port, using a comprehensive communications protocol or via SNMP available Q1 2014.

Ethernet PoE allows detailed measurements even on apparent mains failure.

	Changeover	Serial & 1-Wire [®]	Outlet Relays	Outlet Current	Programmable	Ethernet Option
BFU 114P	✗	✗	✗	✗	✗	✗
BFU 214P	✓	✗	✗	✗	✗	✗
BSU 114P	✗	✗	✓	✗	✗	✗
BSU 214P	✓	✗	✓	✗	✗	✗
RFU 114P	✗	✓	✗	✗	✗	✓
RFU 214P	✓	✓	✗	✗	✗	✓
RPU 114P	✗	✓	✓	✗	✓	✓
RPU 214P	✓	✓	✓	✗	✓	✓
RFI 114P	✗	✓	✗	✓	✗	✓
RFI 214P	✓	✓	✗	✓	✗	✓
RFI 114P	✗	✓	✓	✓	✓	✓
RFI 214P	✓	✓	✓	✓	✓	✓

For the Ethernet option, add the letter E to the end of the part number

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