

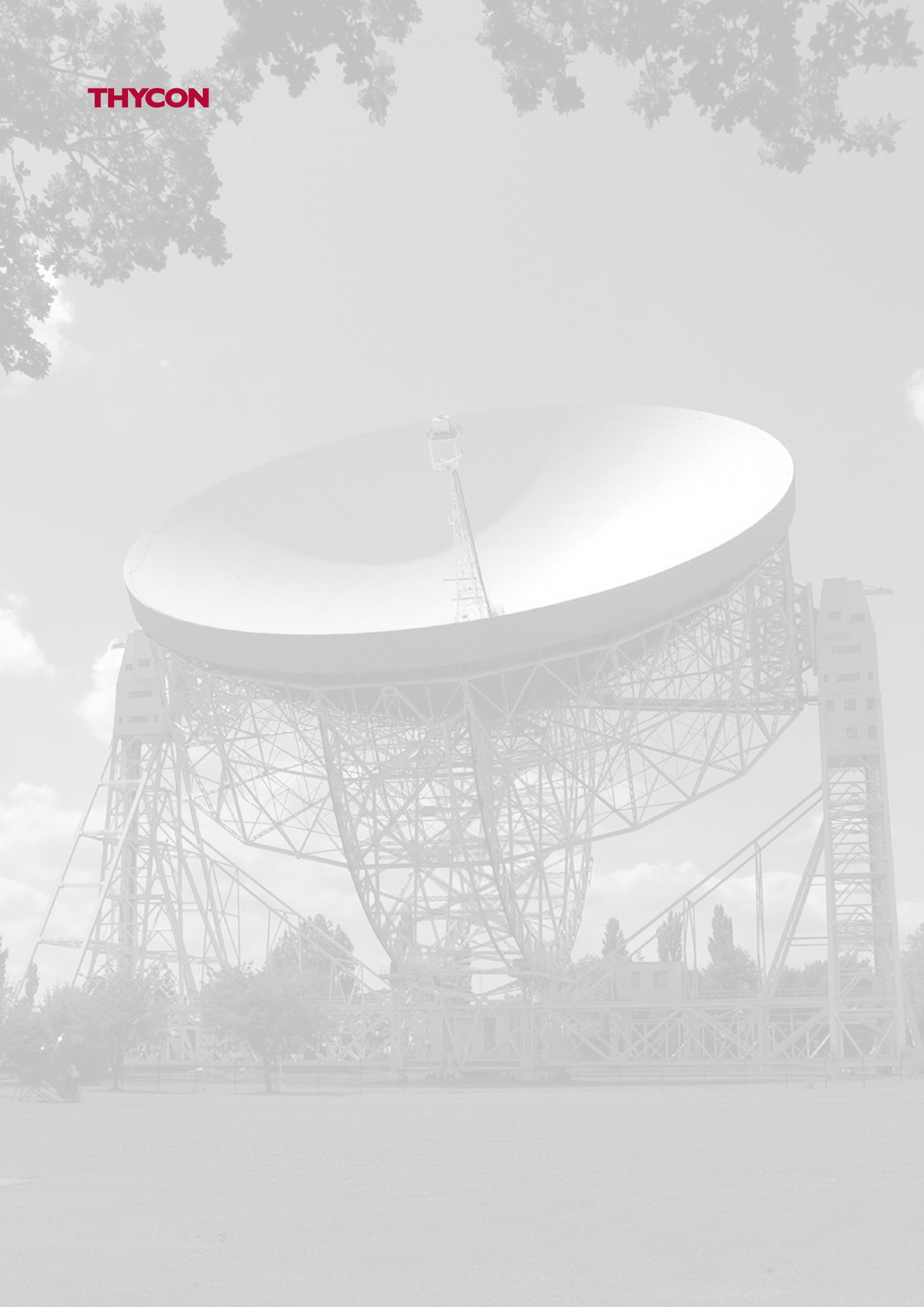
THYCON

Est.1968



Communications

THYCON



Voltage-free contacts

All Thycon products are provided with a standard single voltage-free summary alarm relay that activates whenever an alarm condition occurs. You can monitor the relay, which is rated to 240V/1A, using either normally open or normally closed contacts.

External alarms card

This optional feature provides eight dedicated relay outputs for external, low-level, voltage-free monitoring of any Thycon product.

Alarms for UPS, for example, include:

- new
- summary
- ambient over-temperature
- overload
- battery discharging
- input supply fail
- battery low
- offline

Additional external alarm cards can be installed if separate monitoring systems are to be used. A normally open and normally closed contact is available for each alarm status. Each relay is rated to 240V/1A.

Remote LED panel

This panel utilises external alarm cards to provide visual and audible alarms at a location remote to the Thycon system. It includes *Audible Cancel* and *Alarms Test* push buttons.

Remote LCD panel

An LCD panel identical to that mounted on the product can be installed at remote sites. Control and emergency stop functions on the remote panel are disabled to prevent accidental shutdown of the equipment.



Thycon power system monitor (front)



Thycon power system monitor (back)

SNMP interface

By installing a protocol converter and SNMP interface, computer networks can utilise the SNMP traps provided with all Thycon products.

MODBUS

Industry standard MODBUS over RS232, RS485 or TCP/IP networking is available for PLC style communications.

The serial port is electrically isolated from the power equipment to avoid any possibility of interference with the UPS operation. It supports both 2-wire and 4-wire RTU operation.

The Modbus option provides access to the operating status of the Thycon equipment, including all alarm states and measured quantities, as well as the logged alarms and configuration information.

Thycon power system monitor

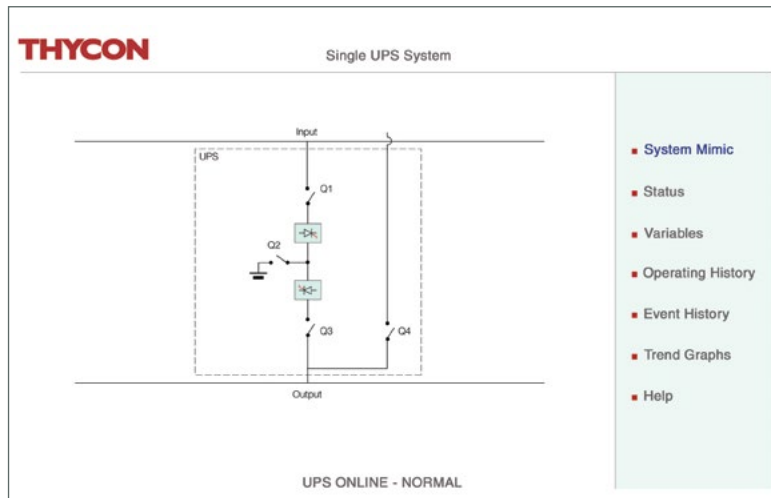
A web page server can be included to provide a real-time monitoring function using a standard web browser on any connected PC, either locally or remotely via LAN or WAN.

The web home page displays a mimic diagram of the equipment with key status information and links to associated pages that provide detailed information on status, alarms, measured quantities and online documentation. The web server module incorporates a database to log all equipment measurements at regular intervals. This information is then used to display trend graphs of quantities such as output voltage, current and power on the web browser.

The web server module may also be configured to automatically generate email messages to nominated destinations on specified alarm conditions so that the appropriate personal can be notified immediately when power system events require attention.

Local printer

Printers can be connected directly to Thycon products in order to log alarms and system data either in real time or periodically to record all operating variables.



UPS power system monitor - system mimic

THYCON Single UPS System

UPS ONLINE - NORMAL

Input supply available
Bypass supply available
Rectifier is on
Inverter is on

- System Mimic
- Status
- Variables
- Operating History
- Event History
- Trend Graphs
- Help

UPS power system monitor - status

THYCON Single UPS System

Input variables

	Red	White	Blue
Volts	254	257	248
Current	978	978	978
Power +	248	251	243
Battery voltage	600		

Output variables

	Red	White	Blue
Volts	240	240	240
Current	1024	973	1117
Power +	246	234	268
Battery current	0		

- System Mimic
- Status
- Variables
- Operating History
- Event History
- Trend Graphs
- Help

UPS power system monitor - variables

THYCON Single UPS System

Operating History

DURATION OF LAST SUPPLY OUTAGE	00:00:11 (h:mm:ss)
TOTAL OUTAGES	18
TOTAL OUTAGE TIME	01:54:31
TOTAL DURATION OF BATTERY DISCHARGES	00:00:00
TOTAL NUMBER OF DISCHARGES	31
TOTAL OPERATING HOURS	289 Hrs
LAST MAINTENANCE PERFORMED	
NEXT MAINTENANCE DUE	
DATE COMMISSIONED	27/07/09

- System Mimic
- Status
- Variables
- **Operating History**
- Event History
- Trend Graphs
- Help

UPS power system monitor - operating history

THYCON Single UPS System

Event History

006	070909	15:14:08	040	RECT OFF
006	070909	15:14:08	142	BYP Q4 CLOSED
007	070909	15:14:08	041	RECT INP Q1 OPEN
008	070909	15:14:08	140	E/STOP ON
009	070909	15:14:07	061	DC CAPACITY LOW
010	070909	15:14:07	094	INV OUTPUT Q3 OPEN
011	070909	15:13:02	190	AMBIENT TEMP NORMAL
012	070909	14:39:15	190	AMBIENT TEMP WARN
013	140509	06:08:03	077	DC Q2 CLOSED
014	140509	05:55:09	077	DC Q2 OPEN
015	280209	03:34:13	142	BYP Q4 OPEN
016	280209	03:34:13	094	INV OUTPUT Q3 CLOSED
017	280209	03:34:12	190	TRANSFER TO INV REQ
018	280209	03:32:53	190	AMBIENT TEMP NORMAL
019	280209	03:28:17	190	AMBIENT TEMP WARN
020	280209	03:25:08	142	BYP Q4 CLOSED
021	280209	03:25:08	094	INV OUTPUT Q3 OPEN
022	280209	03:25:07	191	TRANSFER TO BYP REQ
023	040209	13:25:25	142	BYP Q4 OPEN
024	040209	13:25:25	094	INV OUTPUT Q3 CLOSED
025	040209	13:25:25	190	TRANSFER TO INV REQ

- System Mimic
- Status
- Variables
- **Event History**
- Trend Graphs
- Help

UPS power system monitor - event history

THYCON Single UPS System

Last readings @ 2009 Jul 27 12:00:12

Min	Max	Avg
100	100	100
220 V	220 V	220 V
230 V	230 V	230 V

- System Mimic
- Status
- Variables
- **Operating History**
- Event History
- **Trend Graphs**
- Help

UPS power system monitor - trend graphs



THYCON

THYCON INDUSTRIAL PTY LTD

20 Audrey Ave Coburg

3058 VIC Australia

PH 61 3 9319 9000

FAX 61 3 9319 9001

ABN 17 068 011 049

www.thycon.com.au

info@thycon.com.au

24 HR Service Australia

1800 670 700