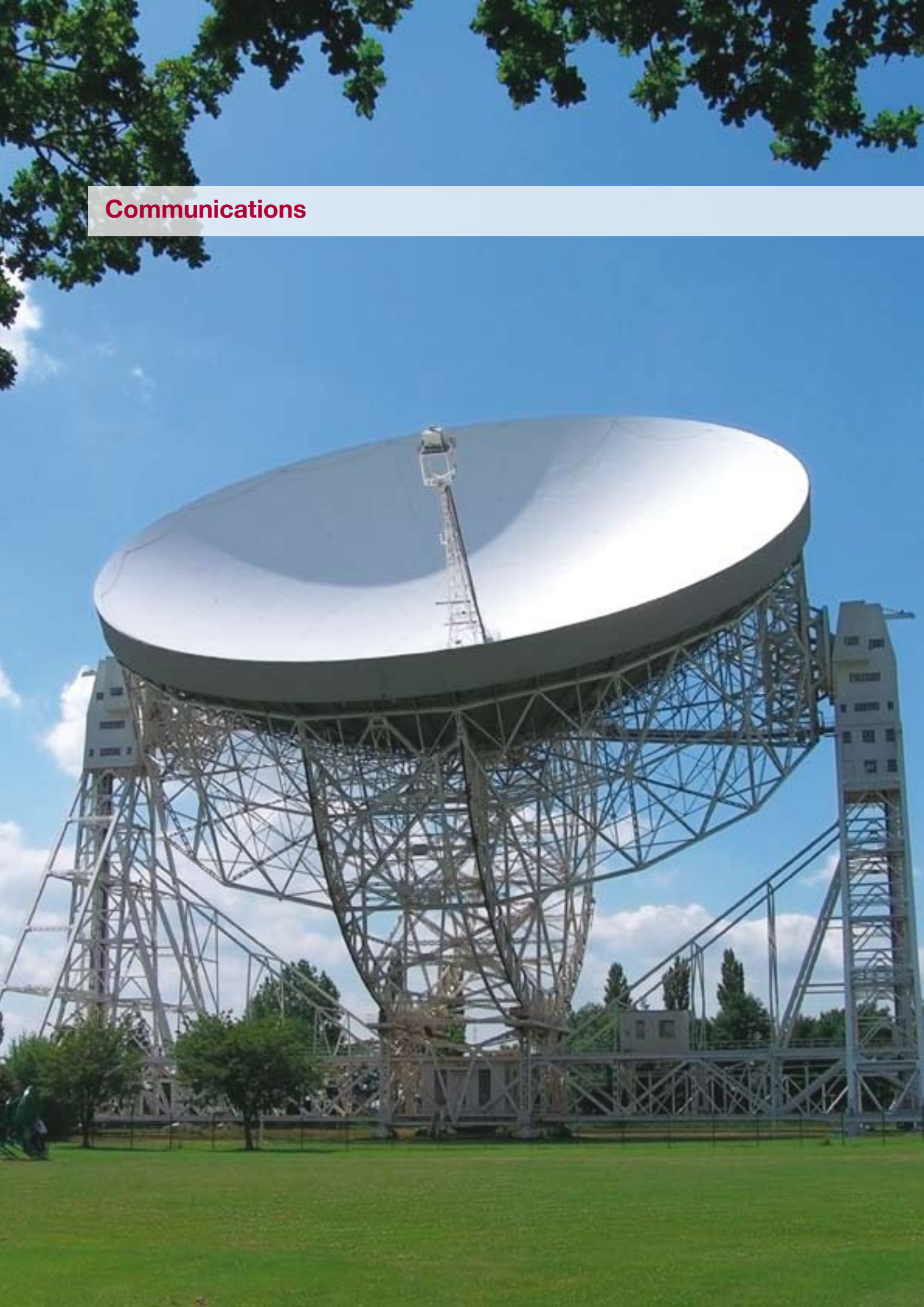


Communications



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.

SNMP interface

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



Thycon power system monitor (front)

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.

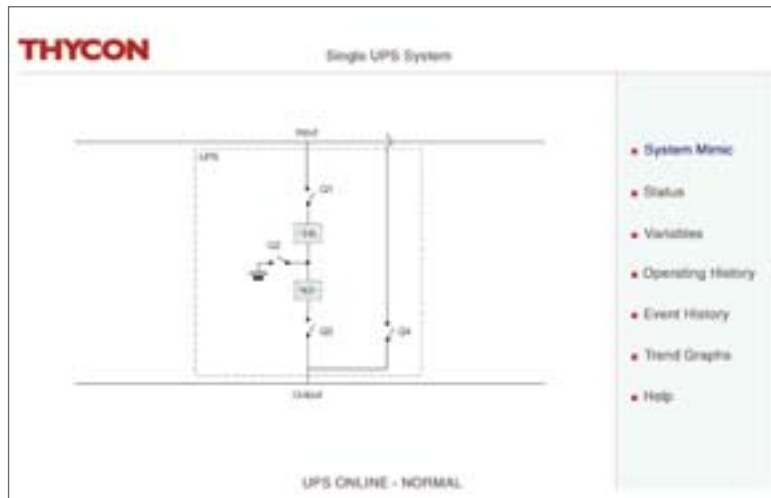
The web server module may also be configured to automatically generate email messages to nominated destinations on specified alarm conditions so that the appropriate personal can be notified immediately when power system events require attention.

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.



Thycon power system monitor (back)



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
Volt	234	237	240
Current	878	878	878
Power \times	248	251	243
Battery voltage	480		

Output variables

	Red	White	Blue
Volt	240	240	240
Current	1004	873	1137
Power \times	245	204	268
Battery current	0		

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

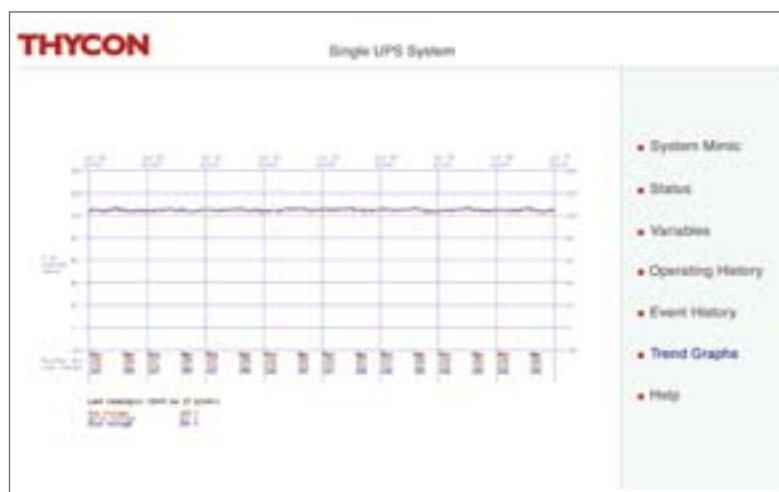
UPS power system monitor - variables



UPS power system monitor - operating history



UPS power system monitor - event history



UPS power system monitor - trend graphs