

# Serial Activity Monitor

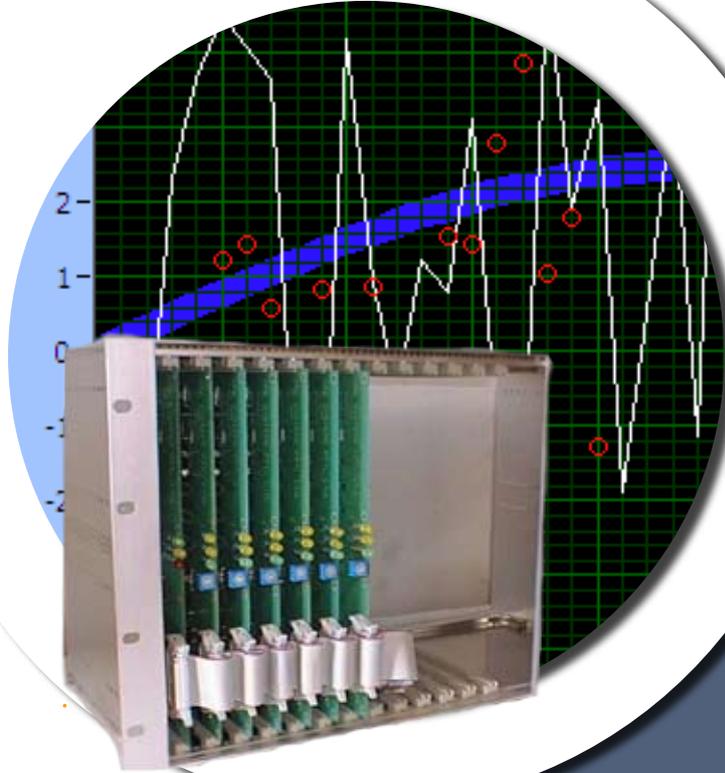
helps telstra stay switched on

test & measurement

custom electronics

engineering software

data management



defence & aerospace

consumer goods

environment

mining

ICT

energy

agriculture

biotechnology

transport & automotive

## Serial interrogation

CPE Systems developed the Serial Activity Monitor (SAM) to analyse and record the data rates of 192 channels of serial transfers between DCE and DTE devices located at a communications service centre. The data rate for each channel is averaged and then compared to set points stored in a configuration file maintained by on-site service personnel.

LabVIEW was the primary software tool used to develop the monitoring system and provides a mechanism for operators to constantly maintain the transfer rates (activity) through the all 192 serial channels simultaneously, while attending to other critical tasks.

In conjunction with the software component, CPE developed customised electronic hardware for the detecting instrument and the interfacing cables.

## Key features

- All 192 software indicators are configured to represent the status of a specific channel attached to an activity card
- The activity and averaged data for all the channels is logged to a spreadsheet for post processing
- Each activity channel is individually compared to a set of limits that will sound an alarm if triggered
- Customised rack enclosure with 192 Channels of serial monitoring at 8 Bit Activity Resolution (0-255/sec)
- Hardware rack arranged in 12 cards each with 16 channels
- Monitoring ports selectable to all input channels
- On screen data is updated at 1 Hz intervals while the acquisition rate is software selectable
- Selection of up to four monitoring channels
- Serial generation of message alarms and transmitted via serial ports at rear of rack
- Logging of activity, monitor and alarm data to half daily record files smaller than 1.44MB
- Alarm Relay contacts controlled by SAM software
- Alarm status sent to the "control card" via serial port

For more CPE user solutions, visit our website.

[www.cpesys.com.au](http://www.cpesys.com.au)

