

Intelligent FOL



SYSTEM CONTROLLER

PPM's System Controller provides users with the powerful means to control and monitor the range of intelligent Test and Instrumentation modules. It features a high-resolution colour display, an intuitive user interface and a comprehensive set of remote control capabilities.

Positioned within the SRK range of cases and subracks, the System Controller will automatically detect the modules plugged into the rack alongside it. As the user steps between the individual modules, the on-screen information and settings change according to the type of module. It is able to control both local and remote modules.

The multi-function 'hotkeys' and rotary control allow navigation through menus, updating of settings and viewing of module status information to be achieved with ease.

Real-time information, such as the Received Light Level from Sentinel Iisc and Sentry Iisc FOL Modules, can be viewed within the *Module Status* screen. In the event of any fault condition, such as an unacceptably low light level or a low transmitter battery, the Controller will inform the user through audible and visual alerts.

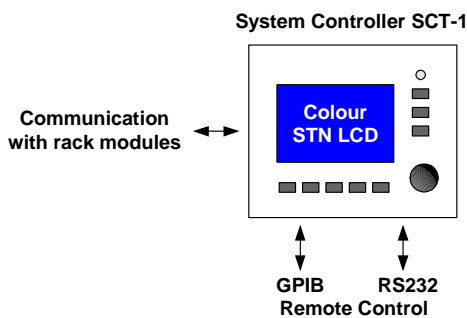
Included as standard, the GPIB and RS-232 interfaces allow the system to be fully automated under the control of a computer. Connections to these interfaces are made via connectors on the rear of the 19" desktop case, SRK-3.

To maintain compatibility with future modules, the System Controller operating system software may be upgraded using updates supplied from PPM.



PPM's System Controller offers the following key advantages:

- Clear and concise screen information for ease of operation.
- Sophisticated control of intelligent Sentinel and Sentry FOL modules.
- Automatically detects modules plugged into the rack, eliminating the need for any manual software configuration to be performed.
- Operating system software is user upgradeable via updates from PPM, enabling forward compatibility with future products.
- Industry standard GPIB and RS-232 interfaces for remote control capability.
- Supports up to eight modules.
- Compatible with **point2point** products.
- Control of other PPM intelligent modules.



Complementary PPM Test and Instrumentation Products

- Sentinel Iisc FOL Optical Receiver module with matching Shielded Optical Transmitter module.
- Sentry Iisc FOL Optical Receiver module with matching Shielded Optical Transmitter module.
- 19" Desktop Cases, SRK-3 & SRK-3R.

SYSTEM CONTROLLER SPECIFICATIONS

PARAMETER

VALUE

Front Panel Display	320 pixels wide by 240 pixels high Colour STN Liquid Crystal Display. Contrast is user adjustable in software.
Front Panel Data Entry	Eight softkeys adjacent to LCD. Front panel data entry rotary knob.
GPIB Interface	Talker / Listener capability for receiving and responding to commands. Connection is via standard 24 pin IEEE-488 connector located on rear of SRK-3.
RS-232 Interface	Baud rates: 9600, 19200, 38400, 57600 and 115200. Selectable software flow control (handshaking). RS-232 serial connection is made via a 9-way D-type Male on rear of SRK-3.
Current Consumption	<4W (in SRK-3, no modules present)

OPERATING CONDITIONS

Operating Temperature	0°C to +40°C
Storage Temperature	-40°C to +70°C

PHYSICAL FORMAT

Housing Options	3U x 28 hp
Supply Voltage	+12Vdc from SRK-3 power supply
Weight	1kg
19" Rack Case Suitability	SRK-3

PART NUMBERING

Part Number	Plug-in Module
SCT-1	•

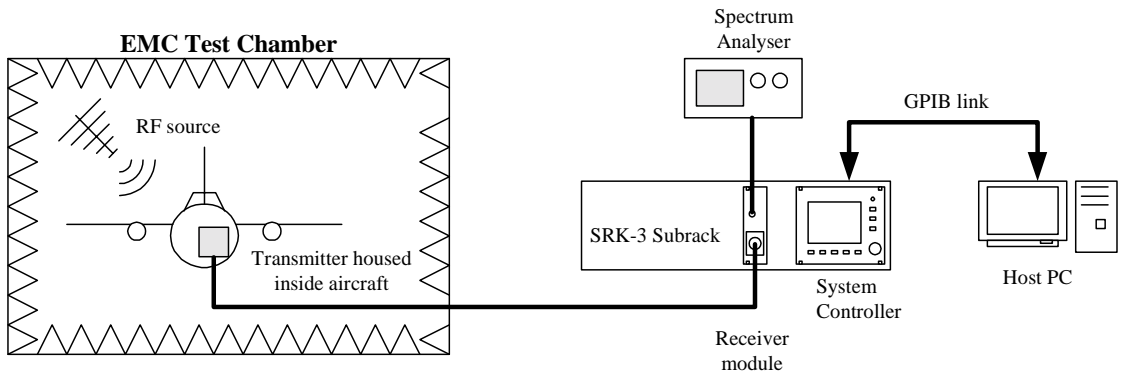
CONTROLLER INSTALLED IN DESKTOP CASE SRK-3 WITH SENTRY IISC RECEIVERS



APPLICATION EXAMPLE

In this typical configuration, a system is being used to relay information from an EMC test chamber to a control room. An aircraft, suspended within the chamber, is subjected to intense electromagnetic energy. Radiation intensity within the aircraft structure is measured using a wide-band RF sensor.

A Sentinel Optical Transmitter is positioned inside the aircraft. The module transmits information from the RF sensor, connected to one of the transmitter’s RF inputs, via an optical fibre that exits from the structure. The fibre optic cable terminates at the Receiver module in the control room, housed within an SRK-3 Desktop Case alongside the System Controller. A spectrum analyser monitors the output from the Sentinel FOL module.



Example setup

The System Controller allows remote control of the Sentinel Optical Transmitter via the Optical Receiver module. Through the on-screen menus, the user can control parameters such as the transmitter gain, desired input, test signal and so on. The System Controller is shown connected to a computer system via a GPIB link, allowing pre-programmed sequences of automated measurements to be performed.

EXAMPLE SCREENSHOTS

Figure 2 shows a typical Module Settings screen that gives access to parameters on a Sentinel Iisc link module. The settings being displayed in Figure (a) are *transmitter on/off* and selection of transmitter *input* (1, 2, 3 or 4), for remote control of the link transmitter. The menu is split into several pages, with the Gain, Impedance and Test Signal parameters grouped together under a separate ‘tab’ for each input. Figure (b) shows how the *Input 1* tab has been selected to reveal the *gain*, *impedance* and *test signal* settings specific to input 1 on the transmitter module.



Figures(a) and (b)

REMOTE OPERATION

The System Controller may be controlled remotely, either via the industry standard GPIB interface, or via RS-232 (serial) protocol. Physical interface connections are made via connectors on the rear of the rack. Remote control gives access to all module parameters that are usually accessible from the front panel. Interface settings are stored in non-volatile memory.

FORWARD COMPATIBILITY

The System Controller may be updated with new operating system software as it is released from PPM. This is easily achieved by connecting the System Controller via a serial cable to any Microsoft™ Windows™ PC running Microsoft™ HyperTerminal™ terminal emulation software.

COMPLEMENTARY PRODUCTS

Desktop Case (with handles)	SRK-3
19" Mounting Case (with mounting ears)	SRK-3R
Sentry Iisc System	
Shielded Optical Transmitter	TRT-G1-5H
Plug-In Optical Receiver	TRR-G1-5R
Sentinel Iisc System	
Shielded Optical Transmitter	TRT-K1-5H
Plug-In Optical Receiver	TRR-K1-5R
2.0Ah Shielded Battery Pack + Battery Linking plug	73511
3.6Ah Shielded Battery Pack + Battery Linking Plug	73512
PAG Battery Charger + 4 Charging Leads	56166
200m Fibre Optic Cable (also available in 50m & 100m lengths)	54301/200
Cable Management Reel	73554
Fibre Optic Connector Cleaning Kit	73553

CONTACT US

For further details of this or any other product from PPM, please contact us at:

PPM Ltd, 65 Shrivenham Hundred Business Park, Watchfield, Swindon, Wiltshire, SN6 8TY, UK.

Email: sales@ppm.co.uk, Tel.: +44 (0)1793 784389 Fax: +44 (0)1793 784391

Web: www.ppm.co.uk