

Protec Fire Detection plc
Protec Algo-Tec™ 6400
 INTERACTIVE DIGITAL ADDRESSABLE
 FIRE CONTROL SYSTEM



Protec
 Protec Fire Detection plc

Protec
 Fire Detection plc

Protec
 Protec Fire

Protec
 Protec Fire Detection plc

Protec
 Fire Detection plc

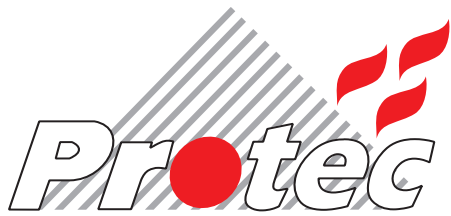
Protec
 Protec Fire

Protec

INVESTOR IN PEOPLE
 CI/SfB 68
 92.049-63 4/2000

INTERACTIVE DIGITAL ADDRESSABLE
 FIRE CONTROL SYSTEM
Protec Algo-Tec™ 6400





Protec Fire Detection plc

Protec Algo-Tec™ 6400

INTERACTIVE DIGITAL ADDRESSABLE

FIRE CONTROL SYSTEM

The Protec Algo-Tec™ 6400 Interactive Digital Addressable System unwrapped:

The Protec Algo-Tec™ protocol developed by Protec's in-house Research and Development team is utilised by the Protec Algo-Tec™ 6400 interactive digital addressable fire control system. Immunity to false alarms, more responsive fire detection, and ease of use has all been achieved to develop one of the most reliable systems available.

Protec Algo-Tec™ 6400

The name Algo-Tec™ is a derivative of Protec algorithms. Algorithms are logical mathematical procedures for solving problems. Protec have developed fire detection algorithms coupled with fuzzy logic specifically designed to reduce unwanted fire alarms and to enhance the sensitivity of the system to true fire phenomenon.

The Algo-Tec™ algorithms are exclusively utilised by the Protec Algo-Tec™ 6400 and 6200 Interactive Digital Addressable Fire Control Systems.

Interactive

Algo-Tec™ evaluates the data of each fire sensor and is able to learn from the information received. This may simply be to recognise that a sensor is becoming contaminated or in a dirty environment and to automatically adjust the alarm threshold to compensate for the background levels (Threshold Compensation). More complex Algo-Tec™ functions include the ability to discriminate between certain fire and non-fire conditions, filtering out certain environmental stimuli, such as steam from a hotel bathroom, and increasing the sensitivity of a sensor when an increase in temperature is detected.

The net effect of the interaction between the sensors and the Algo-Tec™ decision making is enhanced performance, through immunity to false alarms and more responsive fire detection.

Digital Addressable

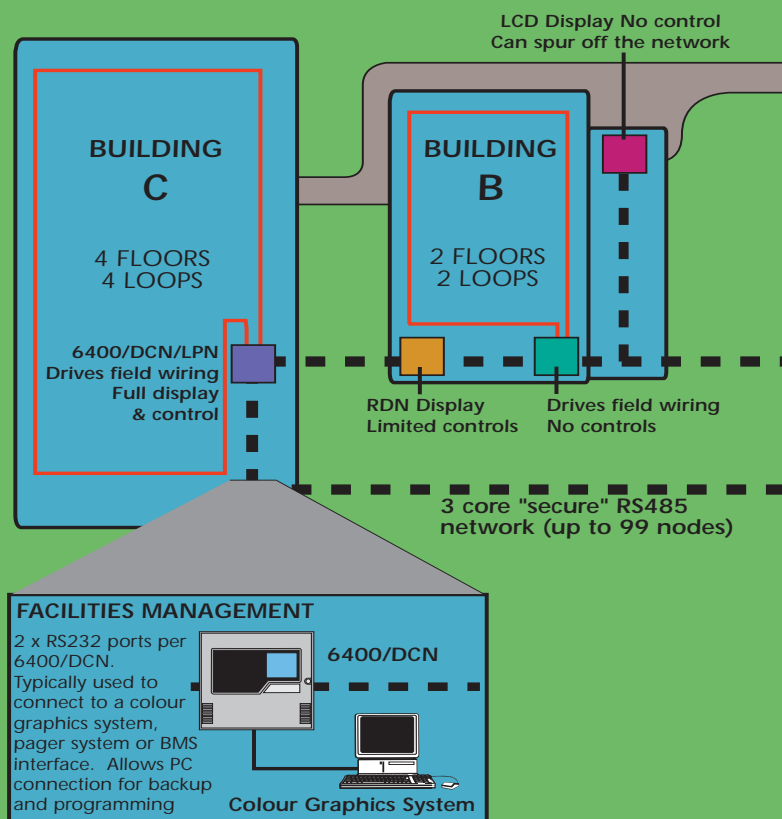
The data communication between the sensors and the control equipment is Digital. The Algo-Tec™ protocol utilised by the 6400 system enables high levels of data to be transferred, providing far more detailed information than was previously achievable with analogue addressable systems. It should however be noted that some analogue addressable systems use digital communication but do not transfer the high levels of data associated with the Algo-Tec™ protocol.

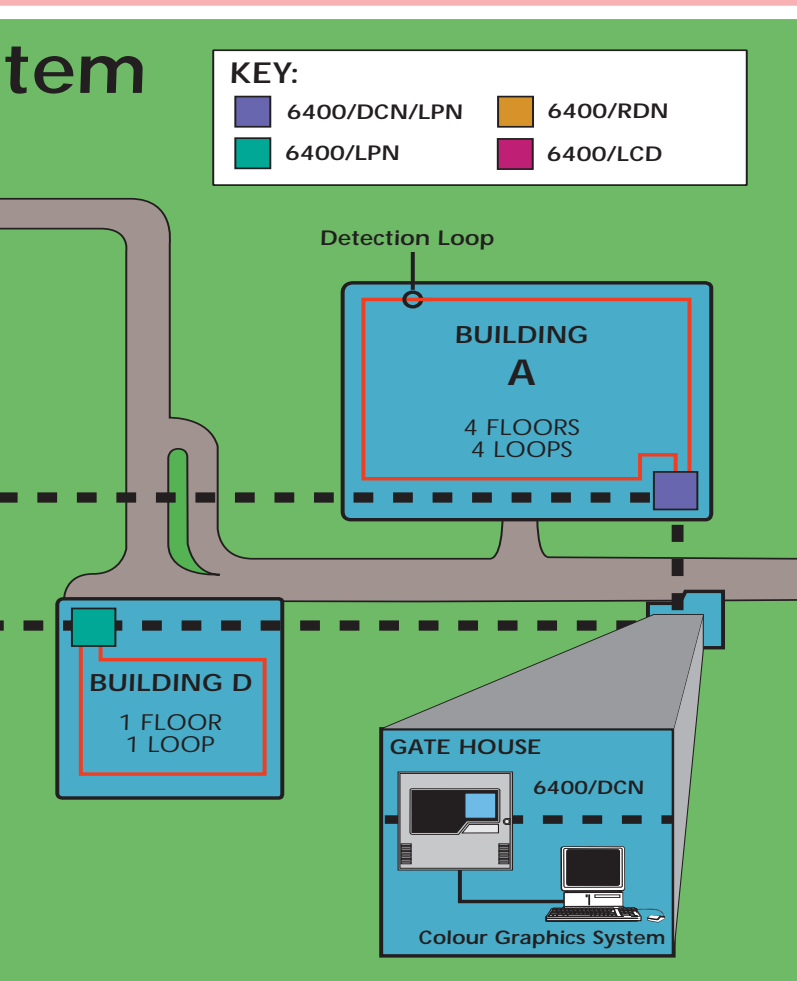
Speed, stability, excellent EMC and security all serve to enhance the Algo-Tec™ Digital signalling. Why select analogue addressable when you can now choose Algo-Tec™ Digital Addressable?



6400/DCN

Typical Network Sys





FEATURES AND BENEFITS

- **Cost Effective** - Distributed network of Display and Control Nodes (DCNs) and Loop Processing Nodes (LPNs) providing a cost effective solution for medium and large sized buildings and sites.

- **Secure Network** - Wired as a loop, the networks dual channel RS485 link ensures that no single fault will affect the system.

- **Easy To Install** - Alarm Sounders, Beacons, Interfaces, Manual Call Points and Sensors can all be loop powered.

- **Reduced False Alarms** - The Protec Algo-Tec™ 6000 interactive fire sensors utilise advanced discriminating algorithms for maximum reliability and immunity to false alarms.

- **Enhanced Performance** - The Protec Algo-Tec™ 6000 sensors learn from their environment, applying interactive decision making algorithms to provide stability, threshold compensation and optimised performance.

- **Secure Detection Loops** - Many Protec Algo-Tec™ 6000 devices incorporate built-in short circuit isolator units. These can be located as required.

- **Easy to Address** - FAST™ (Firmware Addressed Secure Technology) ELIMINATES troublesome and time consuming setting of address cards and DIL switches.

- **Devices Display Address Number** - 'RVAV' Remote Visual Address Verification. Confirmation of the correct location of each device can be easily identified, using the devices in-built LED to indicate the device address number.

- **Accurate Location of Fire Incidents** - 16 characters of loop location text plus 60 characters of device location text ensure pinpoint accuracy of the location of an incident. A further 60 characters of alarm message text provide additional details of possible hazards and /or means of access.

- **Full Site Control** - All system controls and menus can be accessed from any Display and Control Node (DCN) location, including device isolation.

- **On Site Flexibility** - Configuration of all system functions is fully site programmable.

- **Reduced Maintenance Costs** - Early indication and reporting of sensors approaching contamination level, reduce false alarms and enable dirty sensors to be cleaned.

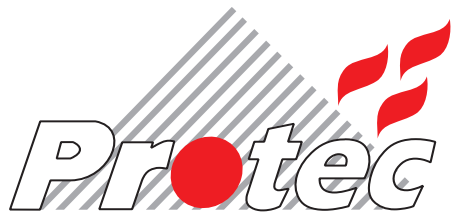
- **True System Management** - As each device incorporates a unique FAST™ serial number encoded during manufacture, TRUE SYSTEM MANAGEMENT is achievable, providing precise DEVICE history in addition to LOCATION history for a specific site system and total traceability of all devices manufactured from our commissioning files for quality management, using optional PC package.

- **Designed to EN54 parts 2 & 4 1998**

INTERACTIVE DIGITAL ADDRESSABLE
FIRE CONTROL SYSTEM

Protec Algo-Tec™ 6400





Protec Fire Detection plc

Protec Algo-Tec™ 6400

INTERACTIVE DIGITAL ADDRESSABLE

FIRE CONTROL SYSTEM

System Features

Overview

The Protec Algo-Tec™ 6400 is a fully distributed, networked interactive digital addressable fire detection and alarm system, ideally suited for medium and large sized buildings such as hotels, offices, universities, hospitals and complex industrial and commercial sites.

Designed and manufactured by Protec, to comply with EN54 parts 2 & 4 1998, the system architecture has been developed to provide a seamless network of Display and Control Nodes (6400/DCNs) and Loop Processing Nodes (6400/LPNs). The nodes can be located to suit the site structure and for convenience of wiring, enabling the loop and sounder circuit cabling to be wired locally to the nearest 6400/LPN and displayed at any 6400/DCN around the network. This eliminates the problem of routing all the system wiring to one central location, usually in the reception of a building or a security lodge with restricted space or access. The integrity of the system is also increased as the network is secure and an isolated incident cannot render the entire system inoperative.

Secure Network

A 'secure network' interconnects all 6400 node options. The network is seamless with all system status and activities communicated around the network and accessible from any 6400/DCN location. The system 'cause and effect' programming is stored within each 6400/DCN and 6400/LPN node for added security. Wired as a loop the network's dual channel fault tolerant RS485 ensures that no single fault can disable the system. In the unlikely event of multiple faults, each node will continue to function independently. Up to 99 nodes can be connected to the network. As all 6400/DCNs display and control the entire system network there is no need for a 'master' panel as they all perform this function. This further enhances the integrity of the system. The network can be wired using copper or fibre optic cables.

Loops

The distributed nature of the 6400 system enables expansion by adding 6400/LPN Loop Processing Nodes to the system network. 6400/LPNs can be 2 or 4 loops. Each loop can accommodate up to 127 Protec Algo-Tec™ 6000 interactive addressable devices, totalling 508 addressable devices per 6400/LPN and a total network capacity of over 50,000 addressable devices. In addition to sensors, interfaces and manual call points, the loop can also support loop powered SOUNDERS, BEACONS and OPTICAL BEAM DETECTORS. Loop powered sounder bases adopt the sensor address to increase the capacity of the loops still further.

Node Options

6400/DCN - Display and Control Node

6400/LPN - Loop Processing Node

6400/DCN/LPN - Combined DCN and LPN (2 nodes)

6400/RDN - Repeat Display Node

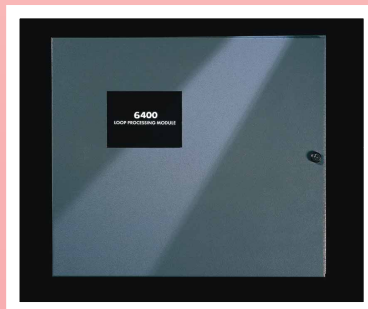
6400/RDN/LPN - Combined RDN and LPN (2 Nodes)

6400/MIMIC - Illuminated Mimic Node

6400/LCD - LCD Display (Listen Only)



6400/DCN



6400/LPN



6400/BC6/24

6400/LPN

The 6400/LPN nodes process the loop data from the field devices, communicate with other network nodes, and implement the cause and effects program for local and network fire signals. Sounder circuits and auxiliary change-over contacts are also controlled from the 6400/LPN.

6400/DCN/LPN

The 6400/DCN and 6400/LPN are combined within a common enclosure. The appearance is the same as the 6400/DCN and uses the 6400/LPN back box to accommodate the cabling.

6400/MIMIC

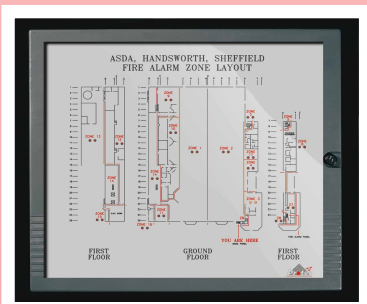
The Protec 6400 customised illuminated mimic can be connected to the network in the same way as other nodes. The LED indicators can be activated by the appropriate zone or specific device activation as defined and the mimic is available in a range of styles and finishes to suit the application. The 6400/MIMIC is a node on the network.

6400/BC6/24

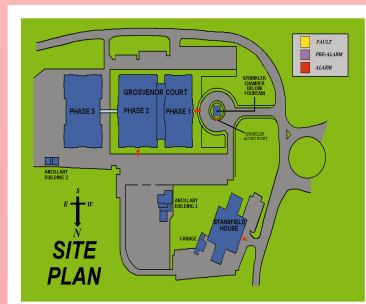
The 6400/BC6/24 power supply is housed in a similar enclosure to the 6400/LPN and is finished in storm grey. The unit incorporates a 6 amp charger and 24A/hr sealed lead acid cells. The charger provides a dual path 24VDC output for parallel supplies to the 6400/LPN or 6400/DCN nodes. A short circuit fault on one path is isolated and the load is provided via the second supply path. Power on and charger fault indications are displayed on the power supply "secret until lit" display and are also relayed to the 6400 network via the node being powered. A range of Protec 6400/BC power supplies are available with an extensive range of battery and charger sizes.



6400/RDN & 6400/LCD



6400/MIMIC



Colour Graphics

6400/LCD

The 6400/LCD is a 'listen only' device which is connected to the 6400 network. There are three function push buttons on the front of the LCD enclosure: menu, select and mute. Pressing the 'menu' button displays the LCD menu functions: view current fire events, view current fault events, and view current disablements. The 'mute' button will mute the fault buzzer on the LCD but will not mute the fire buzzer. There are no system control functions from the 6400/LCD and the device is not classed as a node on the 6400 network. Up to eight 6400/LCDs can be connected between each node on the network.

6400/RDN

The 6400/RDN node has all the functions detailed for the 6400/LCD and additionally has 'silence' & 'reset' push buttons to silence and reset active system fire events. All controls are housed behind a hinged lockable door, moulded from polycarbonate finished in storm grey. The 6400/RDN has an optional printer to print current fire events, fault events or disablements. The 6400/RDN is a node on the network. The 6400/RDN can also be combined with a 6400/LPN in a common enclosure.

Protec Colour Graphics System

The Protec Colour Graphics System is a Windows based PC package providing a graphical representation of large sites enabling the precise location of an incident to be readily identified enabling a prompt response. Using a touch screen or mouse, the operator can track an incident and zoom from a site plan to intermediate plan listing floor levels, then zoom to a specific floor plan and if necessary then zoom to a specific detailed area within the floor plan showing the device in question. Colour prints of the maps can also be printed automatically or on demand.

6400/DCN Overview

Display and controls of the Algo-Tec™ 6400 system are via 6400/DCNs. All the functions of the 6400/DCN are accessed via a modern styled hinged lockable door, moulded from polycarbonate, finished in storm grey with a clear display viewing window, optional polished solid brass or brushed stainless steel finishes for recess mounting only. When opened, the door allows access to the system controls. These controls are SOUND ALARMS, SILENCE, ACCEPT and RESET push buttons plus a qwerty membrane keypad and arrow keys to enable access to the user menu facilities. The display consists of a quarter VGA graphics LCD with backlight, common 'FIRE' indicator, 100 separate zonal fire LEDs, power on, pre-alarm, supply fault, alarms silenced, system fault, print, alarms on, outputs disabled, fire link disabled, test, fault, alarm fault, fire link active, fire link fault, fire link delay, output delay & a 'print on demand' 40 column low noise thermal printer. Two full duplex RS232 ports that are site configurable for baud rate/handshaking are available for site programming and interfacing to BMS, Colour Graphics or Pager systems.

Liquid Crystal Display

The 6400/DCN incorporates a quarter VGA backlit graphics LCD. In normal conditions the date and time is displayed and 'system status: normal'. During a fire event the LCD will display the following:-

- Zone Number in Fire
- Loop Location Text (16 Characters)
- The Device Number in Alarm
- Date and Time of Incident
- Device Location Text (60 Characters)
- Device Alarm Message Text (60 characters)
- Number of devices in alarm

The LCD also displays all faults, disablements, pre-alarms, user menus, past events and analogue values graphically in a bar graph.

Zones

The 6400/DCN has 100 separate secret until lit zonal fire LED indicators. Each addressable device can be allocated to any one of the 100 zones. Expansion panels are available to expand the zonal capacity to a maximum of 800 zones.

Printer

The integral printer is a 40 column low noise thermal printer. In operation the printer will print all system activities on demand detailing the date and time of event; the loop location text, and address number; 60 character device location text; and in alarm conditions, the alarm message text. By accessing the appropriate function from the user menu facility, reports can be printed detailing current faults, current disablements, past events, analogue values, loop devices, fire events or all events from the internal 2000 event historical log.

User Menu

The user menu functions available include:- set time and date, display events, printer menu, disablement menu, test options, text editor menu, clear system fault and access codes. 32 access codes can be configured by entering a 'master user' code. The access codes can be configured to restrict access to certain user menu functions.

The disablement menu enables the user to disable any loop driven device on the 6400 network. When disabled the device is prevented from producing a fire condition on the system. Devices can be isolated by address number, address location text or by zone.

Qwerty Keyboard

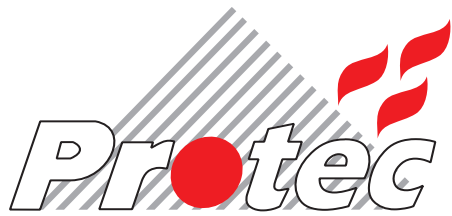
The text editor menu function within the 'user menu', enables the user to edit the 60 character 'device location text' and 60 character 'alarm text'. The text is entered using the in-built qwerty membrane keypad on the front of the 6400/DCN.

On Site Programming

Recognising the problems associated with commissioning and maintaining a complex site, the 6400 system is site programmed using dedicated PC based programs. The entire system configuration can be downloaded from any 6400/DCN via the integral RS232 port and distributed using the 6400 network. The programming method not only reduces on site commissioning, but also provides copies of site data as a backup, stored remote. Hard copies of the programming data can be provided via the PC software.

INTERACTIVE DIGITAL ADDRESSABLE
 FIRE CONTROL SYSTEM
Protec Algo-Tec™ 6400





Protec Fire Detection plc

Protec Algo-Tec™ 6400

INTERACTIVE DIGITAL ADDRESSABLE

FIRE CONTROL SYSTEM

Loop Devices

The Protec Algo-Tec™ 6000 protocol utilises FAST™ addressing (Firmware Addressed Secure Technology). Every FAST™ device is manufactured with a unique serial number.

FAST™ addressing ELIMINATES troublesome and time consuming address cards and dip switching whilst being far more secure than "soft addressing".

6000/OPHT FAST™ Interactive Optical Smoke and Heat Multi-Sensor - Utilising Protec Algo-Tec™ 6000 interactive programmable algorithms, the sensors are suitable for use in all smoke detection applications.



6000/OP FAST™ Interactive Optical Smoke Sensor - Utilising Protec Algo-Tec™ 6000 interactive programmable algorithms, the sensors are an ideal general purpose smoke sensor.



6000/ION FAST™ Interactive Ionisation Smoke sensor - Utilising Protec Algo-Tec™ interactive programmable algorithms, the sensors are particularly responsive to clean burning fires.



6000/TEMP FAST™ Interactive Temperature Sensor - Utilising Protec Algo-Tec™ interactive programmable algorithms, the sensors give a fast response to temperature increases.



6000/BASE Low Profile Common Mounting Base - Compatible with the above range of Protec Algo-Tec™ 6000 sensors.



6000/DIB Dual Loop Short Circuit Isolator Base - To isolate a short circuit fault on either the incoming or outgoing loop cable and maintain the operation of the sensor head inserted into the dual isolator base.



6000/ASB2 FAST™ Addressable Loop Powered Electronic Sounder Base - 90dBa sound output at 1m, 5mA loop alarm load. 3 sounder tone options; constant, pulse or warble, selectable by the control panel. A loop short circuit isolator is incorporated.



6000/ASB4 FAST™ Addressable 4-Wire Electronic Sounder Base - 90dBa sound output at 1m, 8mA auxiliary 24vdc from local power supply. 3 sounder tone options; constant, pulse or warble. A loop short circuit isolator is incorporated.



6000/ASBEA4 FAST™ Addressable 4-Wire Electronic Sounder Beacon Base - 90dBa sound output at 1m, beacon flash rate: 0.25 sec on, 1.5 sec off. 25mA average auxiliary 24vdc from local power supply. 3 sounder tone options, a loop short circuit isolator is incorporated.

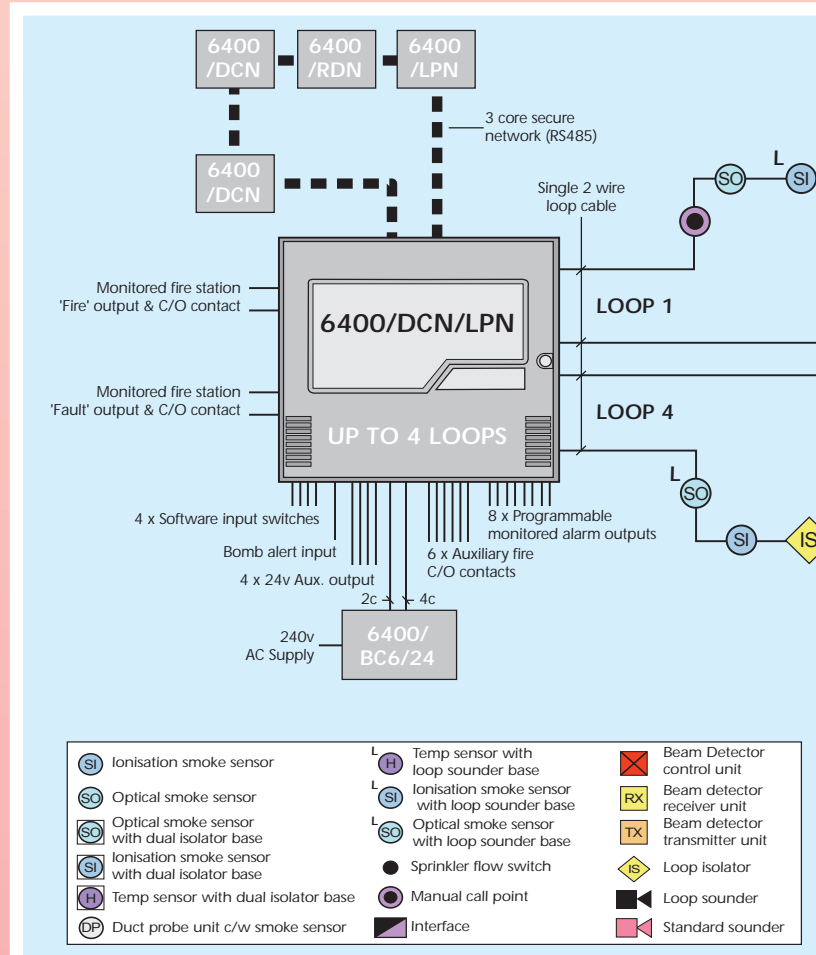


Table detailing the loop standby and alarm load for typical analogue devices.

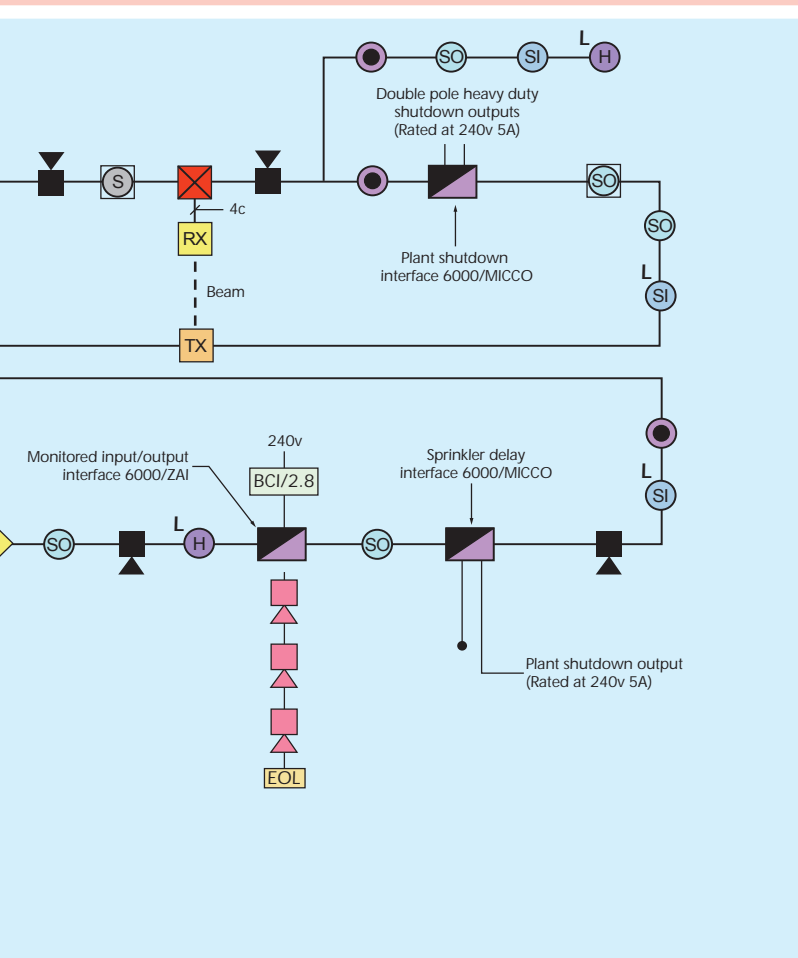
Product	Description	Number of Addresses	Loop Standby Load mA	Loop Alarm Load mA
6000/BGK	Break Glass	1	0.5	0.8
6000/BEAM	Loop Beam	1	15	25
6000/OPHT	Optical Smoke & Heat Sensor	1	0.58	0.88
6000/OP	Optical Smoke Sensor	1	0.55	0.85
6000/ION	Ionisation Smoke Sensor	1	0.52	0.82
6000/TEMP	Heat Sensor	1	0.48	0.78
6000/BASE	Sensor Base	-	-	-
6000/ASB2	Addressable Loop Sounder Base	Adopts Sensor	0.55	5 on Continuous
6000/DIB	Isolator Base	-	0.12	0.12
6000/SYM2R	Addressable Loop Sounder	1	0.5	8
6000/ZAI*	Zone Alarm Interface	1	2	4
6000/MICCO	Monitored Input CC Output	1	1.3	5
6000/FIU	Flush Isolator Unit	-	0.12	0.12

Note: The following Loop Parameters should be observed

1) The total number of addressable devices should not exceed 127 per loop.

2) The total loop alarm load should not exceed 600mA per loop.

* Auxiliary 24Vdc supply required to power the alarm output (if used).



Guide to loop cable conductor sizing for the Protec 6400 system.

		Loop Length (Metres)																				
		500	550	600	650	700	750	800	850	900	950	1000										
Total Loop Load In Alarm (mA)	50																					
	100																					
	150																					
	200																					
	250																					
	300																					
	350																					
	400																					
	450																					
	500																					
	550																					
600																						

		Loop Length (Metres)																				
		1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500										
Total Loop Load In Alarm (mA)	50																					
	100																					
	150																					
	200																					
	250																					
	300																					
	350																					
	400																					
	450																					
	500																					N/A
	550																					N/A
600																					N/A	

The conductor size required is as follows

- 1.0mm² Conductor required.
- 1.5mm² Conductor required.
- 2.5mm² Conductor required.

MAXIMUM LOOP RESISTANCE 16 OHMS PER CONDUCTOR

6000/BGK



FAST™ Addressable Manual Call Point - Key operated test facility, a loop short circuit isolator is incorporated.

6000/DP



Ventilation Duct Smoke Sensor Assembly - Single pipe air sampling unit for air speeds from 0.2 to 15m per sec. supplied with 6000/BASE suitable for use with 6000/OP FAST™ addressable optical smoke sensor.

6000/BEAM



Loop Powered FAST™ Addressable Beam Detector - Comprising of a control unit, receiver unit and transmitter unit. With a beam range of 10-100 metres.

6000/SYM2R



Loop Powered FAST™ Addressable Electronic Sounder - 100dBA sound output at 1m, 8mA loop alarm load. 3 sounder tone options: constant, pulse or warble, selectable by the control panel.

6000/SRZ2R



Loop Powered FAST™ Addressable Weatherproof Electronic Sounder - 100dBA sound output at 1m, 20mA loop alarm load. 3 sounder tone options: constant, pulse or warble, selectable by a DIL switch on the unit. A loop short circuit isolator is incorporated.

6000/SRZ4R



4-Wire FAST™ Addressable Weatherproof Electronic Sounder - 100dBA sound output at 1m, 20mA auxiliary 24vdc from local power supply. 3 sounder tone options: constant, pulse or warble, selectable by a DIL switch on the unit. A loop short circuit isolator is incorporated.

6000/PVR2R



Loop Powered FAST™ Addressable Xenon Beacon - 0.4J flash energy, 35mA loop alarm load. Red beacon body and lens.

6000/SRZ/PVR2R



Loop Powered FAST™ Addressable Sounder - 98dBA sound output at 1m. 0.7J flash energy, 75mA alarm load.

6000/FIU



Flush Mounted Short Circuit Isolator Unit - To isolate a short circuit fault on either the incoming or outgoing loop cables. Suitable for a 47mm deep electrical mounting box.

6000/ZAI



Flush Mounted FAST™ Addressable Zone Alarm Interface Unit - With a monitored detection circuit suitable for use with Protec 3000 series detection devices. Line continuity maintained. Monitored alarm output circuit rated at 24Vdc 1A max. Suitable for a 47mm deep electrical mounting box. A loop short circuit isolator is included.

6000/MICCO



Flush Mounted Loop Powered FAST™ Addressable Monitored Input, Clean Contact Output Interface Unit - With a monitored input circuit suitable for use with simple switch devices and the output is a clean changeover contact 5amp rated at 240Vac. A link can be cut to provide a 7-second delay to the input. Suitable for a 47mm deep electrical mounting box. A loop short circuit isolator is incorporated.

Multi-way Input/Output Interfaces - A range of 16 way input output interfaces are available with monitored alarm outputs or clean changeover contacts. All interfaces are FAST™ addressable.



Technical Specification

6400 Series Common Specifications

Temperature Range
Maximum Humidity
Working Voltage
Secure Network

Node Power Supply

Total Node Load

Year 2000 compliant

0 - 40 Degrees Centigrade
85% Non-Condensing
21.5 - 30V DC.
Dual channel RS485 fault tolerant communications network for up to 100 nodes.
3 wire loop (2 Data & 0V), maximum 1km between Nodes.
Fault monitored dual path 24V DC from 6400/BC Node PSU 4 wire plus 2 wire (2 Primary Power, 2 signals)(2 Sec. Power).
Maximum load to a 6400/LPN or 6400/DCN/LPN is 6 Amp.

6400/DCN

Standby load (Mains Fail Condition)
Alarm Load (Mains Fail Condition)
Display
Zones
Printer
Nodes
RS232 Ports
Auxiliary Output Supply
Common Fire Output (fire station)
Common Fault Output (fire station)
Dimensions (mm)

210mA
390mA
Quarter VGA Backlit Graphics LCD
100 Zone Fire Indicators, plus common 'FIRE' indicator. Expandable to 800.
40 column low noise thermal printer.
The 6400/DCN counts as one node on the network.
Two full duplex RS232 ports for site programming, BMS, Colour Graphics or pager system interfacing.
Two sets of 24V DC output terminals. Total load 1A
24V DC fully monitored output rated at 20mA. 1K EOL.
24V DC fully monitored output rated at 20mA. 1K EOL.
440Wx385Hx104D

6400/LPN

Standby Load (Mains Fail Condition)
Alarm Load (Mains Fail Condition)
Analogue Addressable Loops
Total Loop Load
Nodes
Programmable Alarm Outputs

Auxiliary Output Supply
Common Fire Output (fire station)

Common Fault Output (fire station)

Software Input Switches
Dimensions (mm)

230mA (2 loop) 290mA (4 loop)
460mA (2 loop) 520mA (4 loop)
2 to 4 loops, each with 127 address capacity per loop. Total 6400/LPN capacity 4 loops, 508 addresses.
600mA per loop including all loop connected devices.
The 6400/LPN counts as one node on the network.
8 monitored 24V DC sounder circuits 1A rated. 47K EOL. 6 non monitored - clean changeover contacts (1A rated @24V). Expansion modules available to increase alarm output capability. Up to 127 programmable alarm outputs per loop using loop output devices. Total node load 6A.
Four sets of 24V DC output terminals. Total load 1A
24V DC fully monitored output rated at 20mA. 1K EOL. Dedicated Clean Changeover contacts (1A rated @24V).
24V DC fully monitored output rated at 20mA. 1K EOL. Dedicated Clean Changeover contacts (1A rated @24V).
Class change, day/night mode, bomb alert. Plus four additional non-dedicated inputs.
440Wx385Hx144D

6400/DCN/LPN

Overview

Standby load (Mains Fail Condition)
Alarm Load (Mains Fail Condition)
Nodes
Dimensions (mm)

Combined 6400/DCN and 6400/LPN nodes within a common enclosure. The full specification for a 6400/LPN applies plus DCN controls.
360mA (2 loop) 510mA (4 loop)
750mA (2 loop) 810mA (4 loop)
The 6400/DCN/LPN counts as TWO nodes on the network.
440Wx385Hx144D

6400/RDN or 6400/MIMIC

Standby Load (Mains Fail Condition)
Alarm Load (Mains Fail Condition)
Working Voltage
Nodes
Outputs
Dimensions (mm)

150mA
220mA
21.5 - 30V DC from LPN,DCN or local PSU.
The 6400/RDN or 6400/MIMIC each counts as one node on the network.
Local fault clean changeover contacts (1Amp rated at 24V)
440Wx385Hx104D

6400/LCD

Standby Load (Mains Fail Condition)
Alarm Load (Mains Fail Condition)
Working Voltage
Nodes
Secure Network
Dimensions (mm)

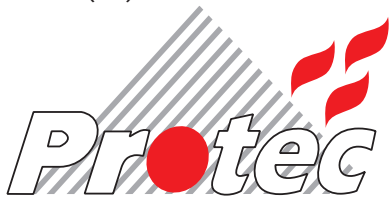
100mA
170mA
21.5 - 30V DC from LPN,DCN or local PSU.
Does not count as a system node. Listen only device.
Can be spurred off from the network loop. Maximum Eight 6400/LCD's between each node (396 per system).
360Wx215Hx47D

6400/ BC6/24

Standby Load (Mains Fail Condition)
Power Supply
Integral Charger
Integral Battery
Dual path output

Supply fault signal
Charger inhibit input
Wiring to 6400 Node
Dimensions (mm)

Complies with EN54 part 4 1998
80mA
Mains 230V AC nominal +/- 10%
2A Battery charge, 4A/6A output load.
24 Ampere-Hour 24V Sealed Lead Acid.
O/P1- 24V DC Primary supply. O/P2 - 24V DC Secondary supply.
Output path is automatically switched if a S/C fault is detected.
Communicated to nearest connected 6400 node.
From 6400 node during fire conditions to increase output to 6A.
4 wire plus 2 wire (2 Primary Power, 2 signals) (2 Sec. Power).
440Wx385Hx220D



Protec Fire Detection plc

www.profire.co.uk sales@profire.co.uk

Head Office:

Protec House, Churchill Way, Nelson,
Lancashire BB9 6RT England
Tel: (01282) 717171 Fax: (01282) 717273



BS EN ISO 9002
Cert. No. FM 10567



INTRUDER ALARMS
Cert. No. 100316



ISO 9001 Certificate
No.s. 201, 188 & 268

Southern Office:

Crayfield House, Crayfield
Industrial Park, Main Road,
Orpington, Kent BR5 3HP
Tel: (01689) 894700
Fax: (01689) 894701

Yorkshire Office:

Copley Hill Trading Estate,
Whitehall Road, Leeds
LS12 1HF
Tel: (0113) 220 4400
Fax: (0113) 220 4401

Midlands Office:

Albrighton House, 135
Allport Street, Cannock,
Staffordshire WS11 1JZ
Tel: (01543) 468646
Fax: (01543) 468647

Scotland Office:

The Glass Cube, Wyman
Gordon Complex, Houston
Road, Livingston EH54 5BZ
Tel: (01506) 498167
Fax: (01506) 498168

Company policy is one of continuous improvement, we reserve the right to change specifications without prior notice.