

Delmatic's **Smart IP FC Router** forms part of a site-wide lighting management and integrated building system, and optimises data transmission across the network.

The Smart IP FC Router is a versatile device that connects Lon devices to IP-based applications, and incorporates built-in drivers for LonWorks and LNS Remote Network Interface as well as Modbus, M-Bus, and SOAP/XML.

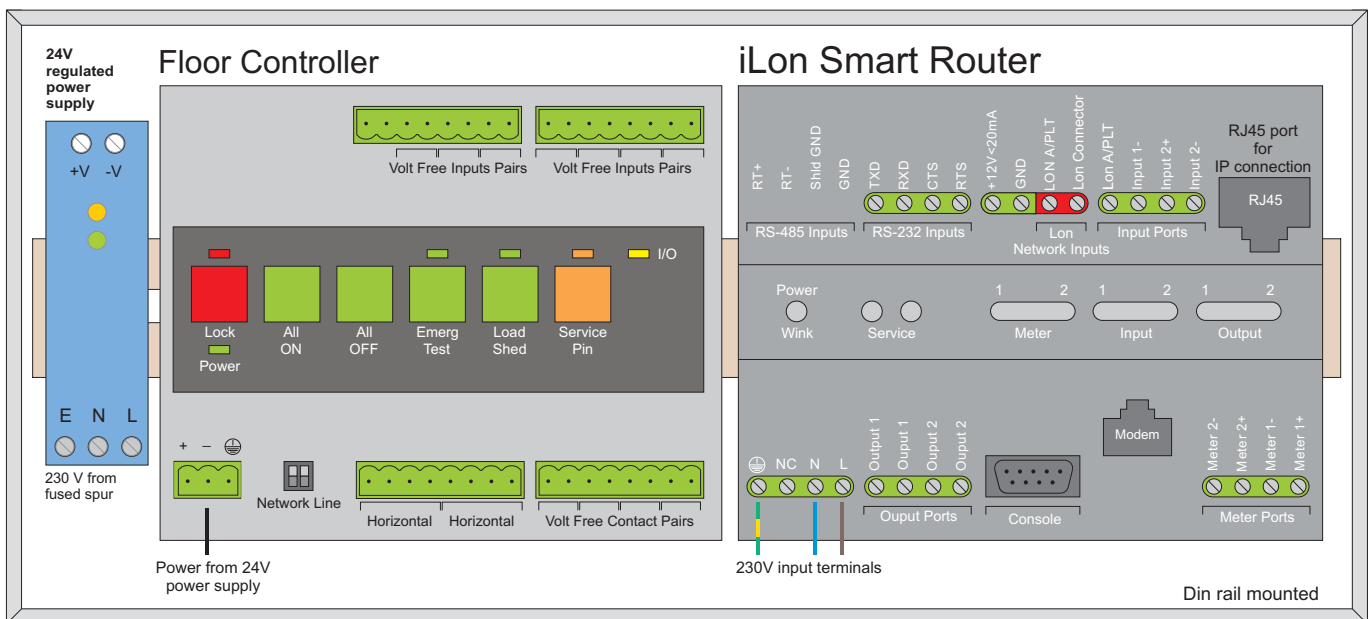
The Smart IP FC Router is easy to configure & manage using Delmatic Lightscape™ software as well as on-board web pages. The router accepts direct digital inputs & provides digital output points.

On the floor controller, passcode protected controls provide access to master on and off functions and emergency test routines. The unit accepts the connection of a laptop or handheld device for local configuration and monitoring and includes integral network termination resistors.

The Smart IP FC Router is supplied BACnet enabled and an optional software upgrade converts the router into a powerful LON BACnet device.



module features



controls

Service button, Reset button, Master on / off control
Emergency test start / stop control
Loadshed start-stop, Network line resistance selector

indicators

Power On, Ethernet link, Ethernet activity, 10/100 Mbps
LonWorks Transmit and Receive activity
Digital inputs, Digital outputs
Remote Network Interface connection status
Emergency test active
Service LED (floor controller) and Service LED (router)

ethernet port

10/100BaseT, auto-selecting, auto polarity

serial ports

1 isolated RS-485 port: 1 EIA-232 port.

digital inputs

2 optically isolated dry contact inputs,
7 inputs suitable for use with contact closure switches

relay outputs

2 SPST relays rated 24VDC@10A.
4 SPST relays rated max. 50VDC@10mA - 1A

network capacity

supports up to 60 lighting control modules

connectivity

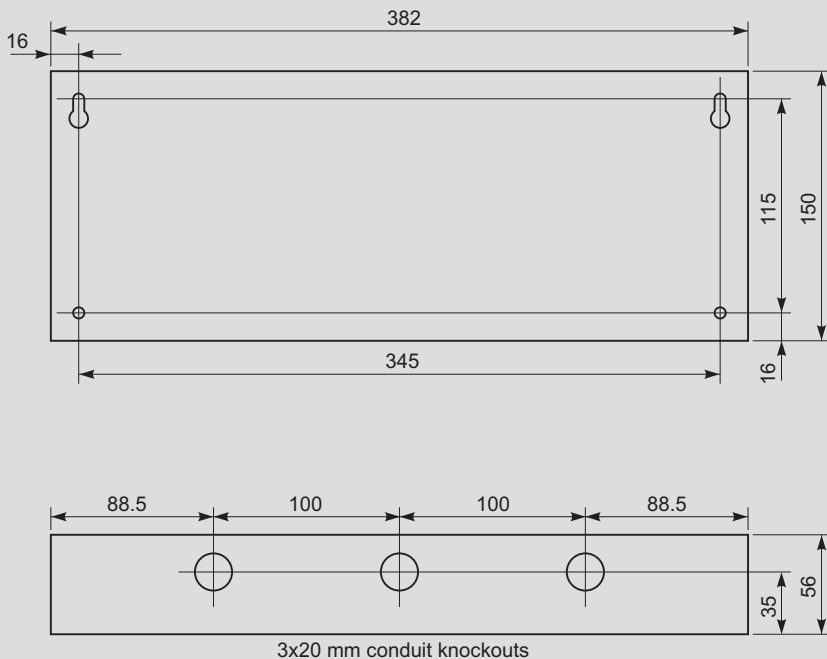
connects to vertical network bus linking all routers via IP
connects to horizontal field bus linking up to 60 lighting control modules served by the router via a free-topology twisted pair cable.

buswire specification

for latest specifications refer to Buswire Specification data sheet

network cable length

500m (maximum total free topology without repeater)



Mounting, installation and dimensions

The Smart IP FC Router should be installed in an accessible location, ideally at a height of 1.5 m from floor level. The box is mounted using four M5 screw fixings. The top two holes use keyhole fixings for ease installation.

All dimensions in millimetres.

Top and bottom sides contain three 20 mm knockouts for conduit entry.

technical details

operating input voltage

100 - 240VAC (-6%/+10%), 50/60Hz

power consumption

<15 watts

operating temperature

0 to +50°C

operating humidity

10 to 90% RH @ 50°C (non-condensing)

dimensions

382 (w) x 150 (h) x 56 (d)

housing/enclosure

Mounting: Painted galvanised steel enclosure finished RAL 7035

network and device interfaces

- IP via built-in 10/100BaseT Ethernet interface
- TP/FT-10 free topology twisted pair
- ISO/IEC 14908-1 (LONWORKS) with built-in LON transceiver
- Modbus RTU with built-in RS-485 transceiver
- Modbus TCP (Modbus TCP/IP) with built-in Ethernet interface
- M-Bus with built-in RS-485 transceiver
- Custom drivers using built-in Ethernet, RS-232, & RS-485 interfaces

user interfaces

The Smart IP FC Router is designed for local or remote configuration via:

- Delmatic's Lightscape Server and GUI Client software
- Built-in web pages for setup, network installation commissioning, scheduling, alarming, data logging, and network integration.

standards-based protocols

- IP local and wide area networking protocols and Internet standards include TCP, IPv4, IPv6, PPP, CHAP, PAP, DHCP, DNS, FTP, ICMP, MD5, SMTP, SNMP, SNTP, HTTP, HTTPS, and SSL.
- Additional IP application protocols: HTML, XML and SOAP
- NAT is supported

IP-852 routing

- ISO/IEC 14908-4 (IP-852) routing of Lon over IP network
- IP-852 channel supports thousands of packets per second for high-performance monitoring and control