

# INTERSOC-R™

fast, reliable, adaptable

modular  
desk power





## COMPLETE SOLUTIONS FOR DEMANDING ENVIRONMENTS

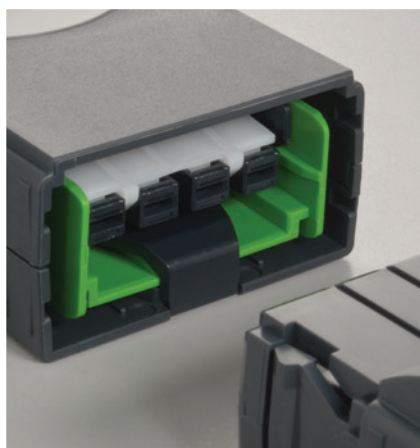
Intersoc-R is a modular desk power system designed to meet the demands of modern workplaces for faster and more adaptable solutions.

Designed with speed of installation and flexibility in mind, Intersoc-R's modular configuration enables thousands of different combinations to be made - providing solutions for every installation requirement.

- Modular system - rapid configuration and easy workstation relocation
- Push-fit connection - modules can simply be disconnected and additional modules inserted
- Busbar interconnection - no need for wiring
- Easily adapted to meet the changing demands of the workplace



# The next GENERATION of power distribution



Available in standard and clean earth versions, with fixed or rotatable socket options and a safe shuttered electrical connection, Intersoc-R is the next generation of power distribution...

- Simple push-fit, module connection with auto-lock mechanism creates robust joints and makes installation quicker and easier
- 32 A system with safe shuttered electrical connections for additional safety, meets the requirements of BS 7671 : 2018 (including section 543.7)
- MCB, RCD and RCBO modules, with reversible hinged covers, provide a full range of circuit protection options
- 2, 3 or 4 gang British standard socket modules with fixed or rotatable, fused or unfused (BS 6396) sockets options - all the options you need to meet the requirements of any installation
- Outgoing connections: flexible interlink or end cap with ST or GST options

## NEW Intersoc On-desk

Personal power and data system



Find out more  
on page 48

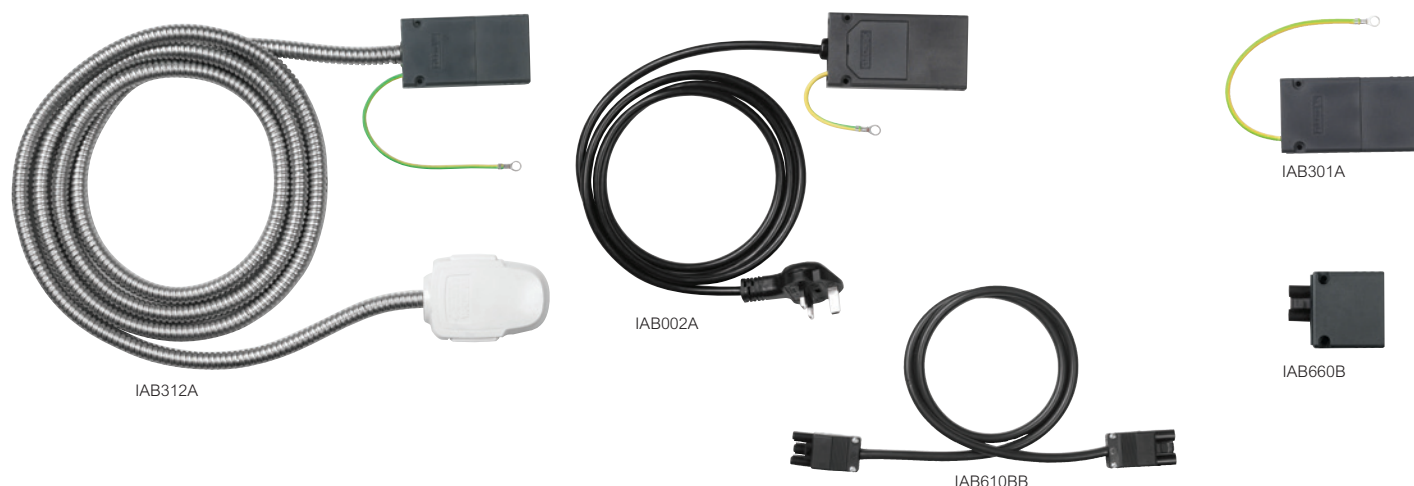






# Intersoc-R™ desk modules

electrical supply



Dimensions and technical information **p. 44-47**

Intersoc-R features fast modular connection with push-fit auto lock mechanism, safe shuttered electrical connections and a robustly designed rigid joint between modules. Available in standard and clean earth versions  
Independently approved by Intertek. Complies with BS 5733 and the relevant parts of BS 1363 part 2. Manufactured in an approved ISO 9001 : 2015 facility. Meets the requirements of BS 7671 : 2018 for high integrity earthing (section 543-7)

Pack	Cat. Nos.	32 A pre-wired feed modules	Pack	Cat. Nos.	16 A feed modules pre-wired to 13 A fused plug
		<b>Standard earth tap-offs (E24 - White tap-off)</b>			
1	IAB311A	3 m unfused metal tap-off Cat. No. DP1332	1	IAB002A	With 2 m 1·5 mm <sup>2</sup> cable
1	IAB312A	5 m unfused metal tap-off Cat. No. DP1532	1	IAB003A	With 3 m 1·5 mm <sup>2</sup> cable
1	IAB315A	3 m 13 A fused 543·7 metal tap-off Cat. No. DP1327	1	IAB005A	With 5 m 1·5 mm <sup>2</sup> cable
1	IAB316A	5 m 13 A fused 543·7 metal tap-off Cat. No. DP1527			
		<b>Low noise / clean earth tap-offs (E25 - Green tap-off)</b>			<b>16 A rewirable feed modules</b>
1	IAC311A	3 m unfused metal tap-off Cat. No. JP2332	1	IAB201A	Rewirable feed module (for cable)
1	IAC312A	5 m unfused metal tap-off Cat. No. JP2532			
1	IAC315A	3 m 13 A fused 543·7 metal tap-off Cat. No. JP2327			<b>16 A feed units with in-built GST connector</b>
1	IAC316A	5 m 13 A fused 543·7 metal tap-off Cat. No. JP2527	1	IAB660B	Compact feed module with male GST connector
		<b>Auxiliary earth tap-offs (E28 - Red tap-off)</b>	1	IAB201B	Feed module with male GST and earth bond lead
1	IAF311A	3 m unfused metal tap-off Cat. No. YP5332			
1	IAF312A	5 m unfused metal tap-off Cat. No. YP5532			<b>16 A pre-wired connection leads</b>
1	IAF315A	3 m 13 A fused 543·7 metal tap-off Cat. No. YP5327			<b>13 A fused plug pre-wired to GST connector</b>
1	IAF316A	5 m 13 A fused 543·7 metal tap-off Cat. No. YP5527	1	IAB002B	With 2 m 1·5 mm <sup>2</sup> cable
			1	IAB003B	With 3 m 1·5 mm <sup>2</sup> cable
			1	IAB005B	With 5 m 1·5 mm <sup>2</sup> cable
					<b>GST to GST connection leads</b>
			1	IAB610BB	1 m length
			1	IAB620BB	2 m length
			1	IAB630BB	3 m length
Pack	Cat. Nos.	32 A re-wirable feed modules			
1	IAB301A	Standard earth (for flexible conduit)			
1	IAC301A	Low noise (for flexible conduit)			
Pack	Cat. Nos.	32 A feed units with in-built Neutrik connectors			
1	IAB301E	Standard earth			
1	IAC301E	Low noise			
Pack	Cat. Nos.	32 A tap-offs pre-wired to Neutrik connectors (NAC3 - 2FC)			
		<b>Standard earth tap-offs (E24)</b>			
1	IAB311E	3 m unfused metal tap-off Cat. No. DP1332			
1	IAB312E	5 m unfused metal tap-off Cat. No. DP1532			
1	IAB315E	3 m 13 A fused 543·7 metal tap-off Cat. No. DP1327			
1	IAB316E	5 m 13 A fused 543·7 metal tap-off Cat. No. DP1527			
		<b>Low noise / clean earth tap-offs (E25)</b>			
1	IAC311E	3 m unfused metal tap-off Cat. No. JP2332			
1	IAC312E	5 m unfused metal tap-off Cat. No. JP2532			
1	IAC315E	3 m 13 A fused 543·7 metal tap-off Cat. No. JP2327			
1	IAC316E	5 m 13 A fused 543·7 metal tap-off Cat. No. JP2527			

## Intersoc-R™ desk modules

protection, BS sockets, end caps and interlinks



IAC502R



IAB402A



IAZ001A



IAB703A



IAB533F



IAB450A



IAB610B



IAB600B



IAB504R



Dimensions and technical information p. 44-47

The BS version is available with fixed or rotatable sockets. Individually fused sockets are available to meet the requirements of BS 6396 : 2008 + A1 2015 (5 x 20 mm anti-surge ceramic fuses)  
A wide range of interconnection solutions are available. When 16 A cabling interconnection is used with 32 A under desk solutions, suitable de-rating protection devices must be incorporated to protect the cables  
All protection and switching modules, end caps and interlinks are universally compatible with standard and clean earth / low noise systems

### Pack Cat. Nos. Protection and switching modules

1	IAB401A	With 13 A fuse
1	IAB402A	With 13 A fuse and sw/neon
1	IAB403A	With 13 A fuse and neon
1	IAB404A	32 A max. single isolation module
1	IAB405A	With 30 mA RCD
1	IAB408A	With neon indicator
1	IAB420A	With 16 A MCB
1	IAB430A	With 20 A MCB
1	IAB440A	With 32 A MCB
1	IAB450A	With 16 A RCBO
1	IAB460A	With 20 A RCBO
1	IAB470A	With 32 A RCBO

### Socket modules – standard (grey sockets)

<b>2 gang unfused</b>		
1	IAB502F	Fixed sockets
1	IAB502R	Rotatable sockets
<b>2 gang individually fused</b>		
1	IAB532F	3·15 A – fixed sockets
1	IAB532R	3·15 A – rotatable sockets
<b>3 gang unfused</b>		
1	IAB503F	Fixed sockets
1	IAB503R	Rotatable sockets
<b>3 gang individually fused</b>		
1	IAB533F	3·15 A – fixed sockets
1	IAB533R	3·15 A – rotatable sockets
<b>4 gang unfused</b>		
1	IAB504F	Fixed sockets
1	IAB504R	Rotatable sockets
<b>4 gang individually fused</b>		
1	IAB534F	3·15 A – fixed sockets
1	IAB534R	3·15 A – rotatable sockets

### Socket modules – low noise / clean earth (green sockets)

<b>2 gang unfused</b>		
1	IAC502F	Fixed sockets
1	IAC502R	Rotatable sockets
<b>2 gang individually fused</b>		
1	IAC532F	3·15 A – fixed sockets
1	IAC532R	3·15 A – rotatable sockets

### Pack Cat. Nos. Socket modules – low noise / clean earth (green sockets) (continued)

<b>3 gang unfused</b>		
1	IAC503F	Fixed sockets
1	IAC503R	Rotatable sockets
<b>3 gang individually fused</b>		
1	IAC533F	3·15 A – fixed sockets
1	IAC533R	3·15 A – rotatable sockets
<b>4 gang unfused</b>		
1	IAC504F	Fixed sockets
1	IAC504R	Rotatable sockets
<b>4 gang individually fused</b>		
1	IAC534F	3·15 A – fixed sockets
1	IAC534R	3·15 A – rotatable

### End cap

1	IAZ001A	Blank end cap
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### Intersoc to Intersoc pre-wired interconnection

<b>16 A</b>		
1	IAB603A	0·3 m length
1	IAB605A	0·5 m length
1	IAB610A	1 m length
1	IAB620A	2 m length
1	IAB630A	3 m length
1	IAB650A	5 m length
<b>32 A</b>		
1	IAB703A	0·3 m length
1	IAB705A	0·5 m length
1	IAB710A	1 m length
1	IAB720A	2 m length
1	IAB730A	3 m length
1	IAB750A	5 m length

### Power out end caps 16 A

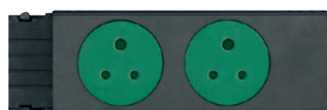
<b>Without flex</b>		
1	IAB600B	End cap with female GST connector
1	IAB600C	End cap with female ST connector
<b>With flex to female GST connector</b>		
1	IAB610B	1 m length
1	IAB620B	2 m length
1	IAB630B	3 m length

## Intersoc-R™ desk modules

protection, BS sockets, end caps and interlinks

## Intersoc-R™ desk modules

technical information



IAC5P2F



IAB5P4F



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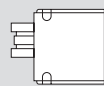
The Intersoc 32 A under-desk range is a complete modular power system. Intersoc offers a wide range of international socket options. The Intersoc modular system features safe shuttered electrical connections and a robustly designed rigid joint between modules. All modules connect with single push-fit action and auto lock.

### Pack Cat. Nos. 6 A Indian socket modules

		2 gang fixed 90° – IS 1293
1	IAB5P2F	Grey – 2 P + E
1	IAC5P2F	Green – 2 P + CE
		3 gang fixed 90° grey – IS 1293
1	IAB5P3F	Grey – 2 P + E
1	IAC5P3F	Green – 2 P + CE
		4 gang fixed 90° grey – IS 1293
1	IAB5P4F	Grey – 2 P + E
1	IAC5P4F	Green – 2 P + CE

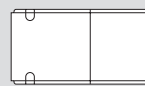
### Under-desk dimensions (mm)

Compact and GST feed unit



75

Feed unit



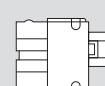
110.5

Blank end cap



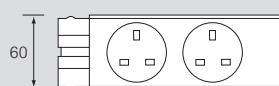
12

GST interconnect male



50

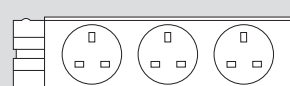
2 socket module<sup>1</sup>



60

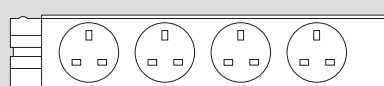
156.5

3 socket module<sup>1</sup>



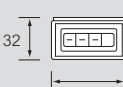
214.5

4 socket module<sup>1</sup>



272.5

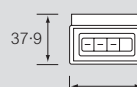
Fixed – end view



32

60

Rotatable – end view



37.9

60

MCB, RCD protection module<sup>1</sup>

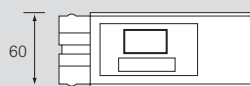


60

174.5

<sup>1</sup> : 84.5 mm depth

Protection module



60

115.5

Interconnection



50

77.5

All dimensions (mm) are nominal

## Testing and accreditation



Intertek

Independently approved by Intertek  
Complies with BS 5733 and relevant parts of BS 1363-2  
Manufactured within an approved ISO 9001 : 2015 and  
ISO 14001 : 2015 facility  
Assessed quality assurance certificate No. 2029

### Electrical test data

Rated current	up to 32 A
Rated voltage	250 V ~
Frequency	50 Hz

### Conductor resistance at 20°C

	Fixed	Rotatable
2 socket module	0.8 mΩ	0.9 mΩ
4 socket module	1.6 mΩ	1.7 mΩ

### Volt drop Live and neutral

2 socket module	1.5 m V/A
4 socket module	3.0 m V/A
Protection module	4.0 m V/A
	(depending on device)
In-feeds :	
16 A	4.0 m V/A
+1.5 mm <sup>2</sup>	29 m V/A/m
32 A	2.0 m V/A
+4 mm <sup>2</sup>	11 m V/A/m
Interconnections :	
16 A/32 A	2.0 m V/A
+1.5 mm <sup>2</sup>	29 m V/A/m
+4 mm <sup>2</sup>	11 m V/A/m

### Earth fault loop impedance

2 socket module	1.5 mΩ
4 socket module	3.0 mΩ
Protection module	4.0 mΩ
	(depending on device)
In-feeds :	
16 A	2.0 mΩ
+1.5 mm <sup>2</sup>	29 mΩ/m
32 A	2.0 mΩ
+4 mm <sup>2</sup>	11 mΩ/m
Interconnections :	
16 A/32 A	4.0 m V/A
+1.5 mm <sup>2</sup>	29 mΩ/m
+4 mm <sup>2</sup>	11 mΩ/m

### Mechanical data

Number of conductors	3
Busbar conductor cross-sectional area	5 mm <sup>2</sup>
16 A rewirable in-feed terminal capacity	10 mm <sup>2</sup>
32 A rewirable in-feed terminal capacity	10 mm <sup>2</sup>

## British Standards

BS 6396 : 2008 + A1 2015 Electrical Systems in Office Furniture and Educational Furniture Specification

BS 7671 : 2018 incorporating amendment No. 3 : 2015. Requirements for Electrical Installation (IET Wiring Regulations 18th Edition)

### Electricity at Work Regulations 1989

### Health & Safety Legislation

Below is a brief outline of the main criteria within the standards :

BS 6396 : 2008 + A1 2015 was published with regard to the use of electrical equipment within general office and educational furniture. This standard sets out in its scope the use and testing of electrical socket outlets and associated wiring when used together with a 13 A BS 1363 fused plug for mains supply and makes provision for the routing of cables through furniture.

For compliance with this standard, socket outlet configurations of up to 4 outlets should be individually fused at 5 A and up to 6 outlets individually fused at 3.15 A.

A note on individual socket fusing – BS 6396 Compliance :

The standard requires individual socket fusing (as per the table below)

Total number of sockets	Individually fused at
2, 3 or 4 sockets	5 A
5 or 6 sockets	3.15 A

Meets the requirements of BS 7671 : 2018

The Health and Safety Executive states that installations which conform to the standards laid down in BS 7671 : 2018 are regarded by the HSE as likely to achieve conformity with the relevant parts of the Electricity at Work Regulations 1989.

Special note should be taken of regulation 543.7 within BS 7671 : 2018 - Earthing requirements for the installation of equipment having high protective conductor currents.

Regulation 543.7 has particular importance when there is a requirement for a quantity of information technology equipment being supplied from a final circuit in a location where the sum of their protective currents exceeds 10 mA in normal use. Due to current in the protective conductor arising from the use of IT equipment, there is a requirement to provide mechanically protected 4 mm<sup>2</sup> conductor (543.7.203 (ii)). Intersoc achieves this when wired in accordance with the installation sheets by providing mechanically protected 5 mm<sup>2</sup> protective conductors within the product.

### Material specification

Module housing	heat resistant ABS
Socket outlets	polycarbonate
Busbars	high conductivity copper CW004A (C101)
Other metalwork	phosphor bronze CW451K (PB102), CW452K (PB103)
	brass CW507L (CZ107), CW508L (CZ108)
	high conductivity copper CW004A (C101) <sup>1</sup>

1 : European grades with nearest British Standard shown in brackets

All dimensions (mm) are nominal



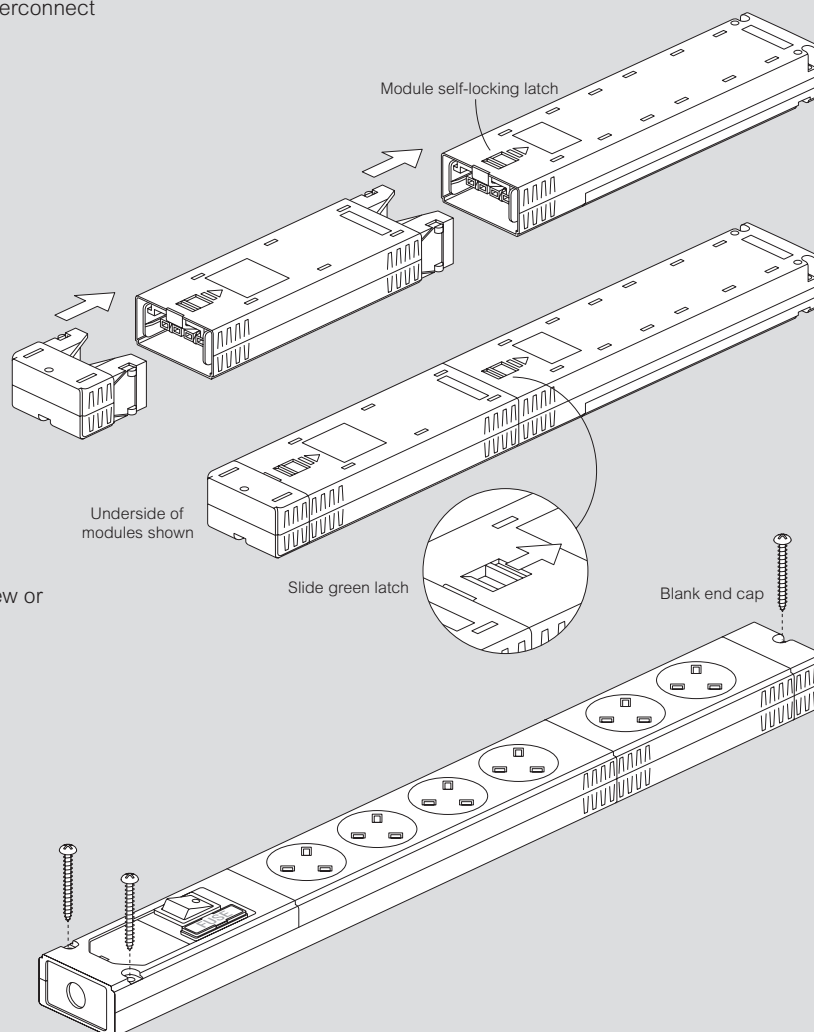
# Intersoc-R™ desk modules

## installation and configuration

### ■ Installation

#### To connect and disconnect Intersoc modules

1. Connection / disconnection to be made by a competent person
2. Before connecting modules ensure they are the correct way up and in line
3. Push modules together one at a time
4. Modules self-lock when fully pushed together
5. To disconnect modules slide green latch to unlock module and pull apart
6. Always end module run with blank end cap or interconnect



#### To fix modules to surface

1. Insert through all fixing holes no. 8 pozi-pan screw or M4 bolt to required length
2. Tighten screw / bolt down to mounting surface

## Product configuration

1. Select the type of distribution system - standard, or low noise / clean earth
  2. Select the means of powering the system - cable or powertrack tap-off
  3. Select the type of in-feed module to match the cable capacity - 16 A or 32 A
  4. Select the means of protection
  5. Select the number of socket modules from the 2, 3 or 4 gang range (individually fused or unfused)
  6. Select fixed or rotatable sockets
  7. Select the interconnection units if required
  8. Finish system with the end cap
- (All modules push fit and lock together on-site or can be factory assembled to customer requirement)

