Cambridge Connectors
## a division of Cambridge Electronic Industries Ltd

Modular Connectors
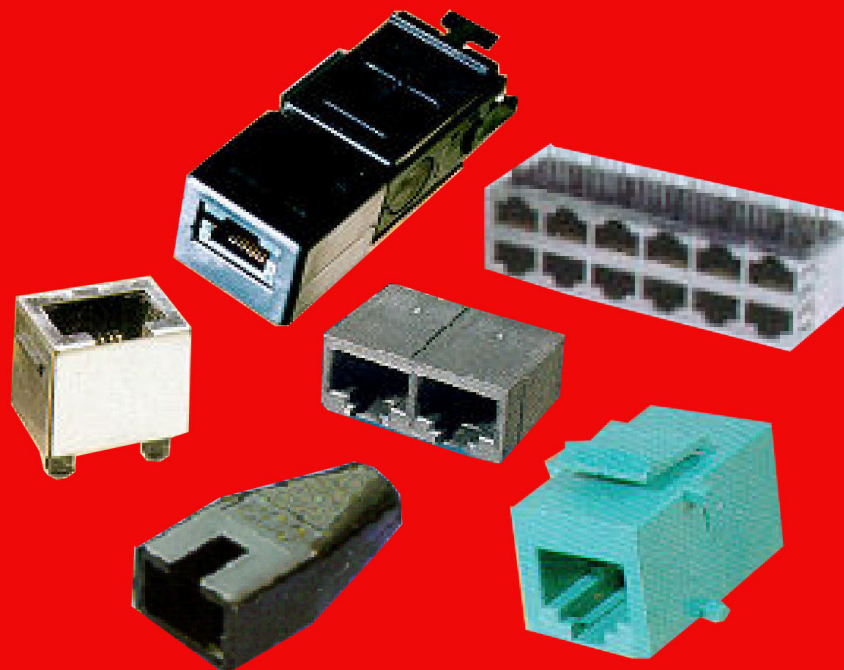
Contents

Modular Connectors

The Cambridge Connectors range of high quality modular plugs and sockets are available shielded and unshielded. The standard contact plating thickness is 30 micron gold over nickel over tin, however other plating options are available. The plugs are moulded in clear Polycarbonate and the standard sockets are moulded in black glass filled Polyester. Other moulding materials are available. The range includes:'

- RJ45 Data Module for IBM® data connectors.
- Top entry sockets 4, 6, 8 and 10 position
- Side entry sockets 4, 6, 8 and 10 positions
- 45 degrees RJ45 Sockets
- Harmonicas 2 to 12 ports 8 positions
- Double Level Harmonicas 8, 12 and 16 Ports
- Cord couplers 8 position
- Tool-less panel mount sockets with rear IDC cable termination
- Standard plugs 4, 6, 8 and 10 position solid and standard wire types
- Enhanced (Cat 5) 8 position plugs
- Long body plugs
- Strain relief boots, various colours
- Hand crimp tooling
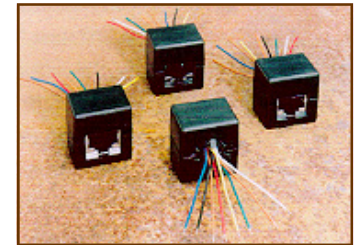
RJ45 Data Module

The RJ45 Data Module designed and manufactured by Cambridge Connectors is constructed to fit into the cable outlet of an IBM® data connector thus enabling RJ45 terminated twisted pair cabling to be interfaced to IBM® cabling systems .

Suitable for installers, integrators and OEMs, the RJ45 Data Module comes in both shielded and unshielded versions and is supplied with pre-terminated colour coded wiring for ease of assembly. The data connector and the RJ45 Data Module come together to form a physically robust unit which is capable of withstanding physical shocks in unfriendly environments. This makes it ideal for demanding applications where cable management is difficult. Manufactured from flame retardant A.B.S., the RJ45 Data Module is ideal for use in applications such as P.O.S./Banks/ Dealer Rooms/Hotels/SCADA; anywhere where twisted pair and ICS cables need to be interfaced with a high degree of integrity and reliability.
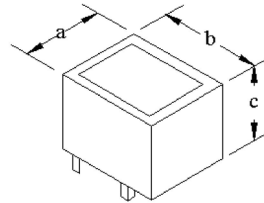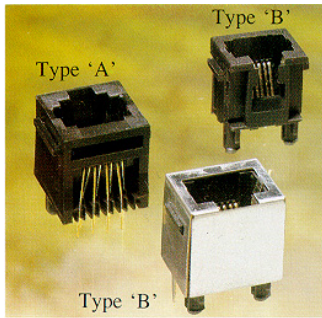
RJ45 Side Entry Sockets
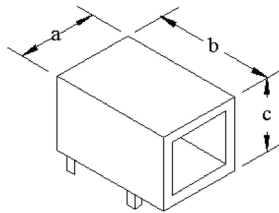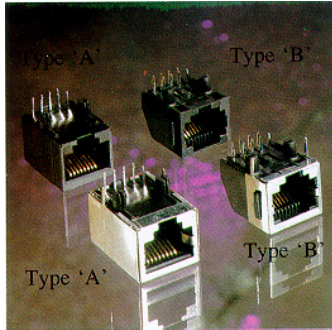
	Standard		Low Profile	
	UTP	STP	UTP	STP
a=	15.24	15.88	15.24	15.86
b=	20.57	21.40	18.03	18.34
c=	12.70	13.65	12.57	13.19

Note: Dimensions refer to 8 position connectors only.
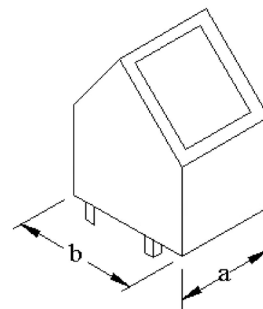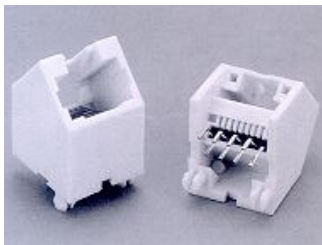Data for other sizes available on request.

RJ45 Top Entry Sockets

	Standard	Low Profile	
	UTP	UTP	STP
a=	15.36	15.40	15.90
b=	15.88	12.53	13.23
c=	16.38	16.25	16.65

Note: Dimensions refer to 8 position connectors only.
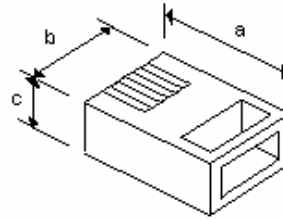Data for other sizes available on request.
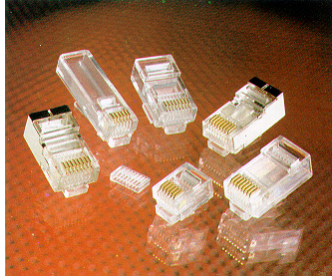
RJ45 45 degrees Socket

	UTP	STP
a=	14.80	15.20
b=	17.00	17.40
overall height	20.99	21.32

Note: Dimensions refer to 8 position connectors only.
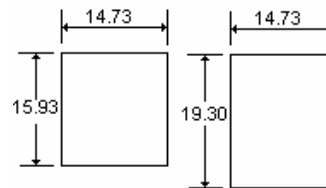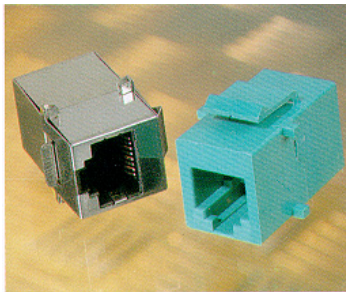Data for other sizes available on request.

Modular Plugs

|	Standard RJ45	Standard RJ11	Long Body RJ11	Cat 5 RJ45	MMJ
a=	21.46	12.34	15.56	21.46	12.34
b=	11.68	9.65	9.65	11.68	9.65
c=	8.30	6.60	6.60	8.30	6.60

All plugs apart from the Long body style are considered type 'A'. The Long body plug is classed as type 'C'. Other non-standard styles are avilable.
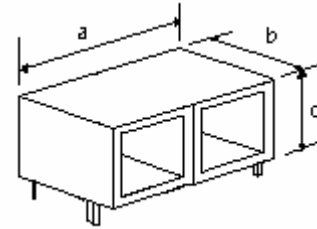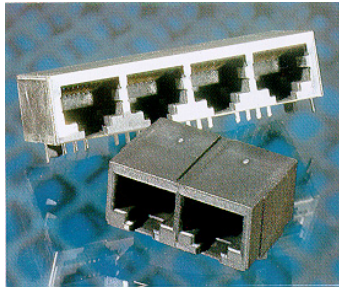
Modular Cord Coupler

The Cord Coupler is available in 4, 6 and 8 positions. It is designed to be mounted into panels up to 2.04mm thick. These items are classed as standard type 'A'.

Tool-less Jack
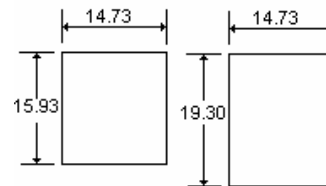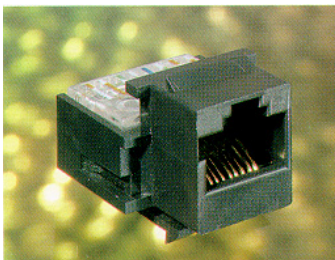
Note: Dimensions refer to 8 position connectors only.
Data for other sizes are available on request. These items are classed as standard (type 'A').

RJ45 Harmonicas

Note: Dimension s refer to 8 position connectors only.
Data for other sizes are available on request. These items are classed as standard (type 'A').

		2	4	5	6	8	10	12
UTP	a=	30.48	58.42	72.39	86.36	144.30	142.24	170.18
UTP	b=	20.57	20.57	20.57	20.57	20.57	20.57	20.57
UTP	c=	12.70	12.70	12.70	12.70	12.70	12.70	12.70
STP	a=	31.12	59.06	73.03	87.00	114.94	142.88	170.82
STP	b=	21.27	21.27	21.27	21.27	21.27	21.27	21.27
STP	c=	13.80	13.80	13.80	13.80	13.80	13.80	13.80

RJ45 Double Level Harmonicas
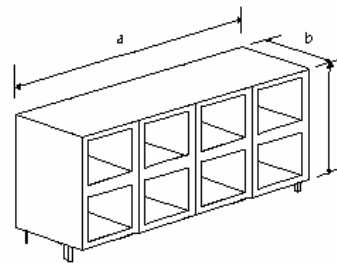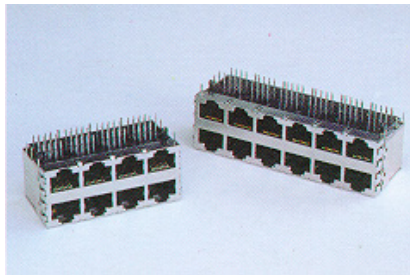
number of ports

	Standard (STP)_		Low Profile (STP)		
	8	12	8	12	16
a=	59.19	87.13	59.19	87.13	115.07
b=	28.50	28.50	28.50	28.50	28.50
c=	28.05	28.05	25.30	25.30	25.30

Note: Dimensions refer to 8 position connectors only. Data for other sizes available on request.

RJ45 Double Level PCB Jacks
Specification - Dimensions

2 x 1

2 x 2

PCB LAYOUT/TOP VIEW

2 x 1

PCB LAYOUT TOP VIEW

2 x 2
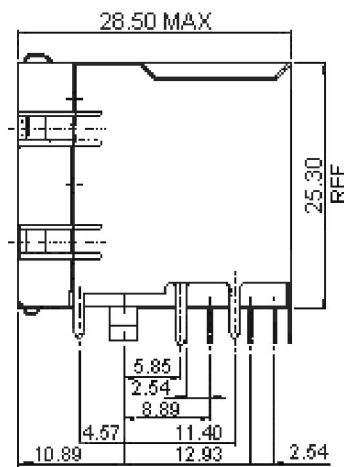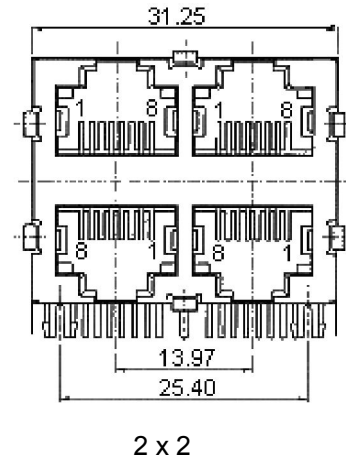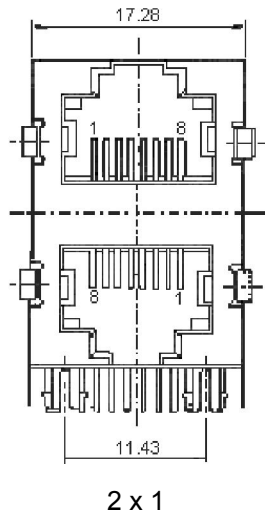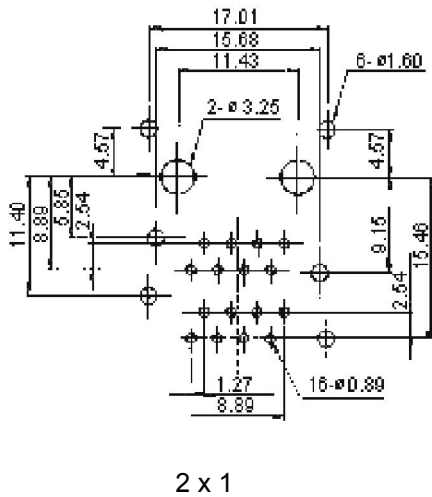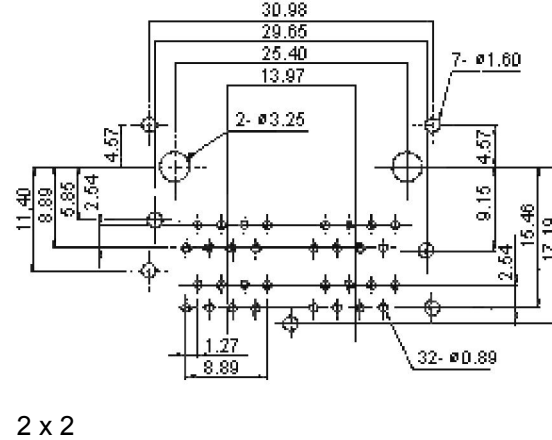
Materials:

- **Shielded**   :0.25mm Thickness STainless Case Tin Plated on Ground Pin
- **Housing**   :Standard Material   Glass Filled Polyester UL 94V-O
                        Stranded Colour   Black
- **Contact**   :0.35mm Thickness Alloy C5210, Gold Plating Over Nickel in Contact Area.
                                        Tin Plating Over NIckel in Solder Area

- **Gold Plating** :Selective Gold Plating

RJ45 Strain Reliefs - PVC
(without latch cover)
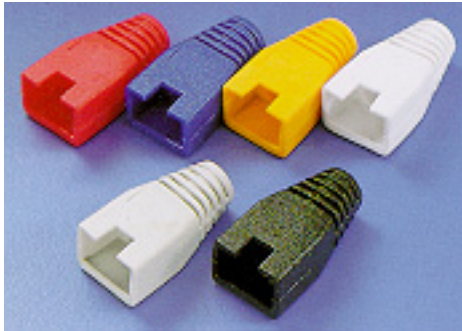
RJ45 Strain Reliefs - PVC
(with latch cover)

RJ45 Strain Reliefs - 2 Part ABS
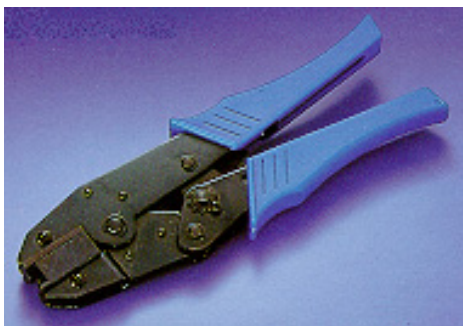

Part No. BAA-010
Available in Black only

RJ45 Strain Reliefs - 2 Part ABS

Part No. TLG 83

The hand crimp tools are light to medium duty ratchet style tool with
interchangeable die sets and tension adjustment.

Ordering Code   B A S 8 8 - 01 - N N N A A B 1

Series Indicator:
Modular Wiring

Sockets only:
A = Standard
B - Low Profile
Plugs Only:
C - Long Body

P - Plug (male)
S - Socket jack or Receptacle
C - Cord Coupler
H - Harmonica
D - Double Level Harmonica

4 - 4 contact positions
6 - 6 contact positions
8 - 8 contact positions
1 - 10 contact

4 = 4 cpmtacts ;paded
6 - 6 contacts loade
8 - 8 contacts loaded
1 = 10 contact loaded

01 - Single Port
Harmonicas only
02 - Two Port
03 - Three Port
-
12 - Twelve Port

Plugs only	Sockets Only
A = Round cable, Solid conductor (26-28 AWG)	N = Side entry PCB mount
B = Round cable, Stranded conductor (26-28 AWG)	P = Top entry PCB mount
C = Flat cable, Stranded conductor (26-28 AWG)	R = IDC Cable termination
Adaptors/Cord Couplers	T = 45 degree angle PCB
S = Straight through	

N = Not shielded
S = Full shield

Plugs only	Sockets Only
A = Centre latch, unkeyed	N = Will accept centre latch plug keyed or unkeyed plug
B = Centre latch, keyed	P - Will accept centre latch plug unkeyed plug
C = Off centre latch, unkeyed	
D = Side latched (x2), unkeyed	

A = Standard

A = Flange mount	E = Data connector mount
B = Flangeless mount	F = Panel latch
C = Flush mount	Z = When not applicable i.e. Plugs
D = Notch front	

B = Plug
E = Socket, harmonicas, Cord

1 = 0.8 microns of gold, other plating thickness available on request