



EN4165 / SIM RJ45 Ethernet

Integrate a RJ45 Ethernet in a rectangular connector

- to protect it against environmental aggressions
- with one of the smallest form factors on the market



BROCHURE 05/23 - V2.0

Customer Service
2 rue Clément ADER, Zac de Wé
08110 CARIGNAN
FRANCE
Tel : +33 (0)3 24 22 32 66
Fax : +33 (0)3 24 22 38 72
customer-service@amphenol-airlb.fr
www.amphenol-airlb.fr



PRESENTATION

Amphenol Air LB has expanded its range of modules for high speed signal and now offers two versions of RJ45 Ethernet modules:

- Standard version
- Angled PCB contacts version

They can be mounted in all SIM / EN4165 connectors.

Use of a rectangular connector, mounted on panel, reduces the required space on the structure.

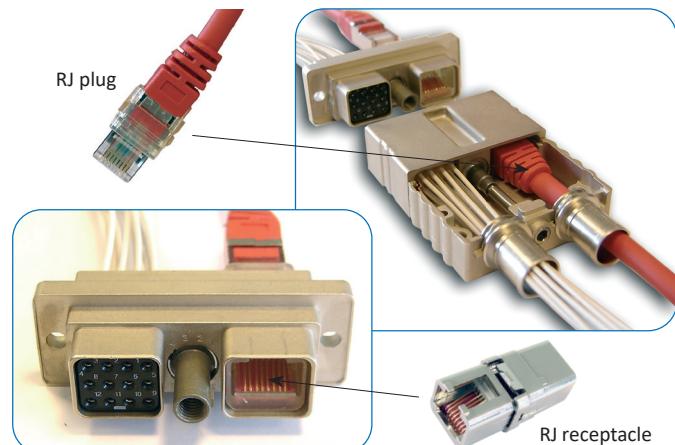
The optimization is even better when several rectangular connectors are mounted juxtaposed -> **Space saving**

The insertion of the RJ45 plug into the module requires no tool

-> **Time saving**

Its locking is characterized by a sensory and auditory click.

The RJ45, integrated in a rectangular connector, is protected against the environmental aggressions (salt spray, humidity, shocks, vibrations, ...) -> **Reliability**



Application example

TECHNICAL DATA

MATERIAL

Shell : Thermoplastic

MECHANICAL

Shocks : 50 g during 11 ms
Vibrations : Sinusoidal, frequency from 10 to 500 Hz, 10 g,
 3 H per axis
Cable handling in the plug: 100 N in the axis

CLIMATIC

Operating temperature: -40° to +100°C permanent
(given by the RJ45 cable)

DATA TRANSMISSION

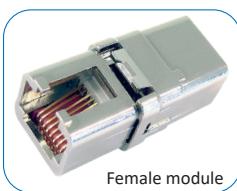
	Standard version	Cat 3	Cat 5E	Cat 6	Cat 6A
Information Solu- tions	Standard	ISO11801 ; EIA/TIA568			
	Data rate	10 MBit/s	1 GBit/s	1 GBit/s	10 GBit/s
	Frequency	16 MHz	100 MHz	250 MHz	500 MHz
	Class Ea	x	x	x	x
	Class C	x			

	Angled PCB cts version	Cat 5E	Cat 6	Cat 6A
Information Solu- tions	Standard	Ethernet IEEE 10G base T		
	Data rate	1 GBit/s	1 GBit/s	10 GBit/s
	Frequency	100 MHz	250 MHz	500 MHz
	Ethernet IEEE 10G base T	x	x	x

For more information, graphics and test reports are available in the SIM connectors catalogue.

PART NUMBERS

■ STANDARD VERSION



Part number		
	Male module	Female module
Class Ea (category 6A)	SIM M D 0145 P N	SIM M D 0145 E S N
Class C (category 3)		SIM M D 0145 S N

The female module is not compatible with the back accessories.

■ ANGLED PCB CONTACTS VERSION



Part number		
	Male module	Female module
Ethernet IEEE 10G base T	SIM M D 0145 E P S	SIM M D 0145 E S S

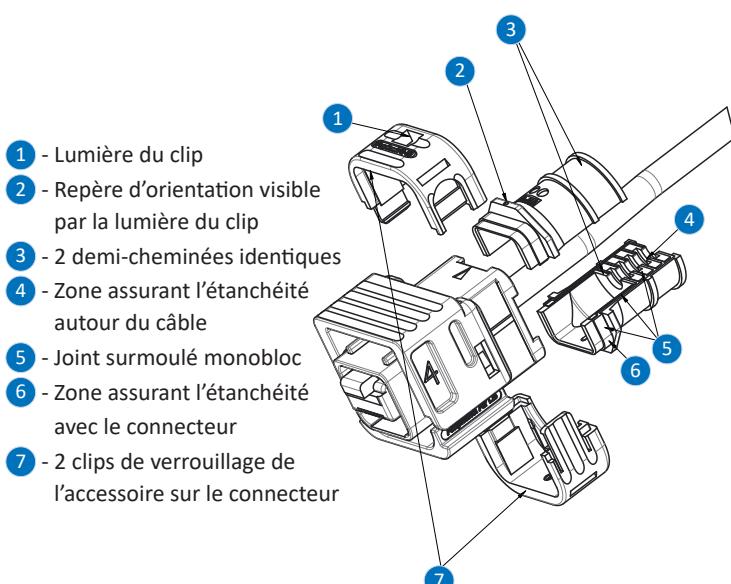
ACCESOIRES

■ BOUCHON DE VOL POUR EMBASE

Il assure la protection contre les chocs, la poussière et les fluides.



■ CHEMINÉE ÉTANCHE POUR CONNECTEUR MONOMODULE



L'utilisation de cet accessoire permet d'atteindre une étanchéité de niveau IP61.

Utiliser une embase spécifique avec joint d'étanchéité au fond.

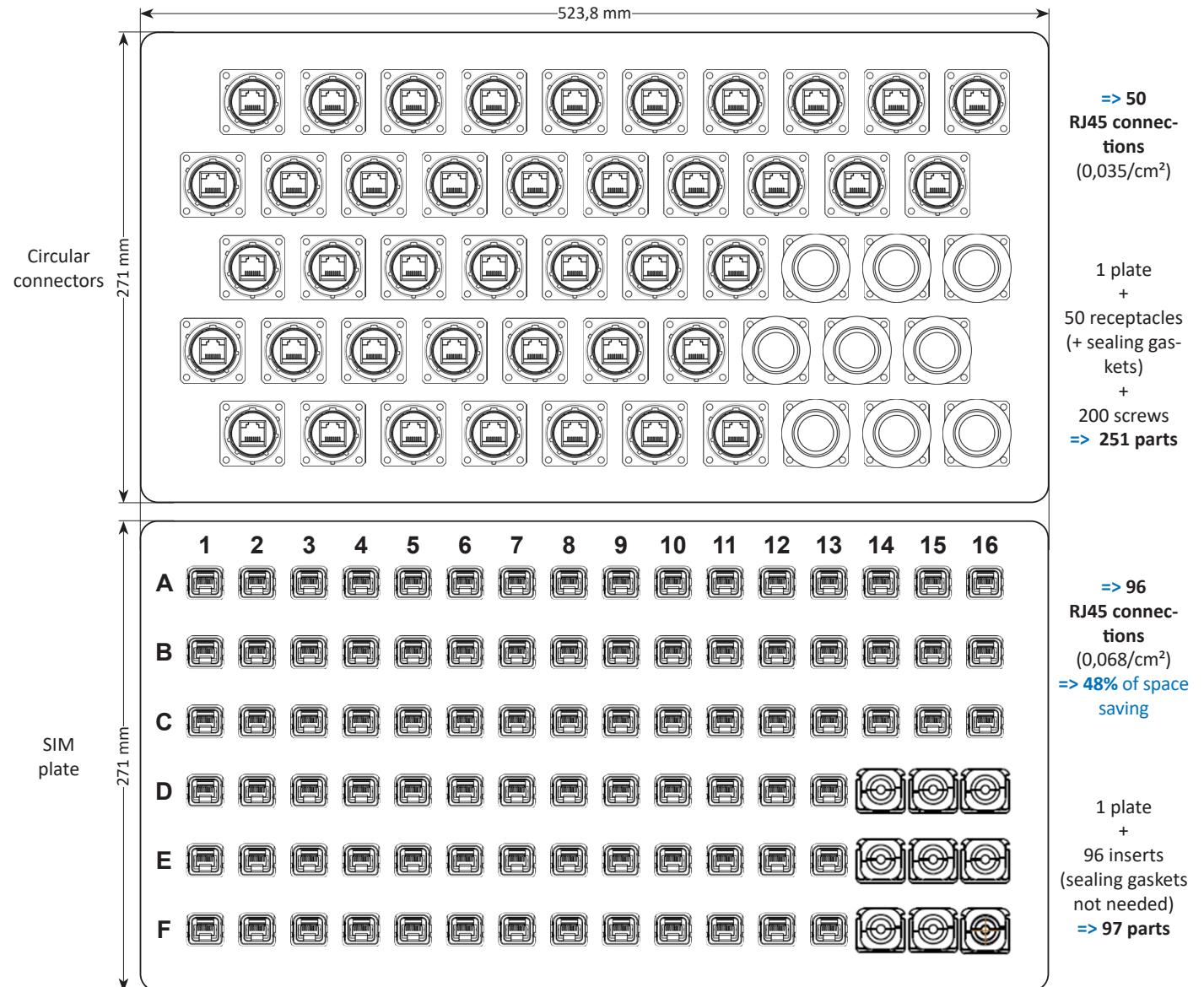


Maintenir l'accessoire fermé avec un collier de serrage en utilisant une pince de serrage type MS 90387-1 (position 3-5).

Note : les cheminées ne peuvent s'assembler que dans la configuration présentée ci-contre.

OPTIMIZATION OF SPACE REQUIREMENTS

Example of SIM RJ45 Ethernet modules integration on a SIM plate compared to RJ45 circular connectors implantation on a plate with similar dimensions.



Monoblock machining -> **TIME SAVING ON ASSEMBLY** ⏳

Removing fasteners -> **FOD REDUCTION** 🛡️

Single part number -> **SUPPLY CHAIN SIMPLIFICATION** 🛒

Juxtaposition of connectors -> **SPACE SAVING** 🌐

Design optimization -> **WEIGHT SAVING** ⚖️

OVERALL COST SAVING 💰