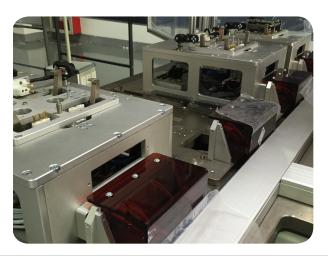




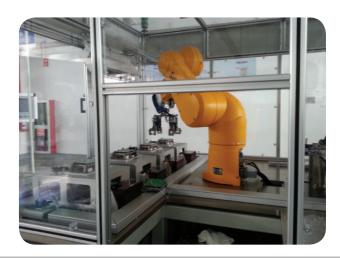


# Manufacturing and Production Test Line Solutions

Docking connectors have a long history in the automotive industry, but they can also be applied to other markets that require in-circuit testing, burn-in testing, and verification and validation tests. Industries leveraging wireless connectivity in their products



require their probe cards to be hard docked for testing, showing preference to docking connectors over standard coax connectors. These test facilities prefer to reduce the manual threading of coax cables and require a simple, reliable connector with little need for reconfiguration. Docking connectors are able to reliably mate 100s of connections with various I/O without an engaging mechanism that is perfect for automated test systems.







## Preconfigured I/O: More Options. Shorter Lead Times.



Floating bushings
I for reliable mating

## Why Docking Connectors?

Engagement mechanisms are not always necessary in small I/O applications. Modern docking connectors are used with automatic handling equipment to mate test adapters, which reduces the time it takes to test, and makes them an ideal solution for production or manufacturing environments. It also minimizes operator interaction, which reduces opportunity for error.

VPC's floating bushings help to ensure a successful mate each and every time. A floating frame paired with guide pins provides precise alignment between the receiver and ITA with each mating cycle.





#### Modular, scalable, and rugged

The D1 docking connector offers options for mixed-signal functional tests in manufacturing and production test environments. Despite its small form, the frame can be configured with up to 160 signal pins in less than 1U of height. With .020" of compensation for alignment, its floating bushings ensure a consistent mating for over 100,000 cycles.

The compact design can be configured for a variety of tests that require signal, power, digital data, or RF.





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Simple is better. Our latest docking connector frame accepts any of VPC's trusted iCon or 90 Series modules. These modules have a long track record and have been used in many test industries. Preconfigured modules translate into shorter lead times, better tolerance control, and a high cycle life. Our modules can be used with signal, coax, power, twinax, thermocouple, and high speed digital.





#### The D3 Docking Connector

The D3 is compatible with any of the dozens of 90 Series modules customers use in larger test systems. This configuration provides more signal density than its iCon counterpart, and can provide up to 672 contact points in less than a 2U height. These solutions are designed with floating bushings on both the ITA and receiver side, providing .040" of compensation for alignment.

310 131 101 • Receiver, D3, 90 Series Modules, 3 Positions



#### The D4 Docking Connector

The D4 can accept high density iCon modules to provide a hybrid I/O configuration fit for a manufacturing or production test setting. Fully populated, operators can leverage 640 contacts in less than a 2U height. These solutions are designed with floating bushings on both the ITA and receiver side, providing .040" of compensation for alignment.

310 131 101 • Receiver, D4, iCon Modules, 4 Positions





## **Docking Connector Frames**



#### **Specifications**

Frame Weight	D1 • .2 lb [.09 kg] D3/D4 • .48 lb [.20 kg]
Frame Material	Nickel Plated Aluminum
Guide Pin Material	Heat Treated Stainless Steel
Floating Bushing Material	Nylon
Internal Bushing Material	Stainless Steel
Operating Temperature	-55° C to 85° C
Cycle Life Rating	100,000 cycles



1.655 in [42.037 mm]



3.435 in [87.249 mm]

6.85 in [173.99 mm]



**410 131 102 •** ITA, D1, iCon Module, 1 Position

**410 131 101 •** ITA, D3, 90 Series Modules, 3 Positions

Part #	Description
RECEIVER	
310 131 101	Receiver, D3, 90 Series Modules, 3 Position / Receiver, D4, iCon Modules, 4 Positions
310 131 102	Receiver, D1, iCon Module, 1 Position
ITA	
410 131 101	ITA, D3, 90 Series Modules, 3 Positions / ITA, D4, iCon Modules, 4 Positions
410 131 102	ITA, D1, iCon Module, 1 Position
STRAIN RELIEF PLATE	
310 113 456	Strain Relief Plate, Receiver, iCon
510 109 296	Strain Relief Plate, ITA, 90 Series
510 109 298	Strain Relief Plate, Receiver, 90 Series
510 109 598	Strain Relief Plate, Receiver/ITA, SIM Module, For PCB or Wired Solutions