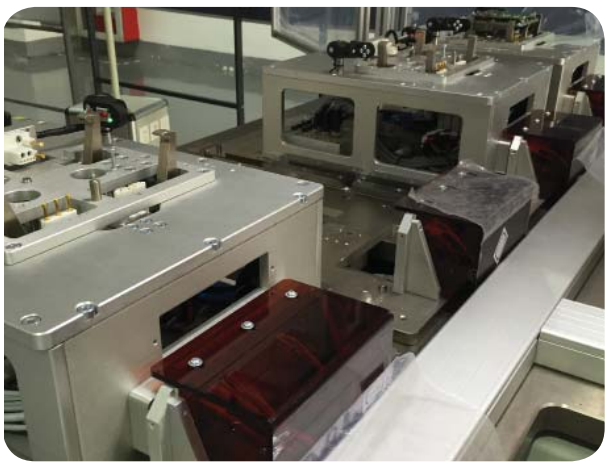
iDock Series

Features and Benefits

- Up to 0.040" [1.016 mm] of compensation for alignment
- Compatible with iCon or 90 Series modules
- High speed PCB options available
- Rated for 100,000 mating cycles

Manufacturing and Production Test Line Interface 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.



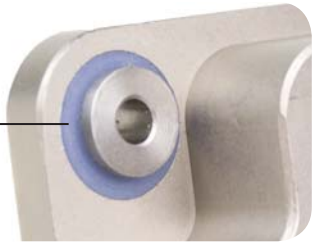
Preconfigured I/O: More Options. Shorter Lead Times.

Automatic Docking Connectors

Engagement mechanisms are not always necessary in small I/O applications. Automatic 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 the 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.

Floating bushings for reliable mating



PCB options are available

Modular, scalable, and rugged

The D1 docking connector offers options for mixed-signal functional tests in manufacturing and production test environments. Despite its extremely compact design, the frame can be configured with up to 160 signal pins in less than 1U of height. With .020" of radial float the connector ensures 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.

New Interface - Same Trusted Modules and Contacts

Simple is better. The D3/D4 frame is reversible and can accept 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, vacuum, and high speed data rates.

High Speed PCB Options Available!

The D3 Configuration

The D3/D4 frame is compatible with any of the dozens of 90 Series modules customers use in larger test systems. The D3 configuration accepts three 90 Series modules and provides up to 672 signal contact points in less than a 2U height. The D3/D4 configurations have floating bushings on both the ITA and receiver frames and can provide a sum of .040" of radial float. The D3 and D4 configurations share the same part number.

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

The D4 Configuration

On the reverse side of the frame, the D3/D4 frame also accepts four high density iCon modules to provide up to 640 signal contact point in less than a 2U height. The D3/D4 configurations have floating bushings on both the ITA and receiver frames and can provide a sum of .040" of radial float. The D3 and D4 configurations share the same part number.

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

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 mating cycles

VTAC Right Angle Compatible!

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

410 131 101 • ITA, D3, 3 Module, 90 Series Modules

Part #	Description
RECEIVER	
310 131 101	Receiver, D3/D4, 3 or 4 Modules, Accepts 90 Series or iCon Modules
310 131 102	Receiver, D1, 1 Module, iCon Module
ITA	
410 131 101	ITA, D3/D4, 3 or 4 Modules, Accepts 90 Series or iCon Modules
410 131 102	ITA, D1, 1 Module, iCon Module
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