

i2 *Micro iCon* Hybrid Solution

Virginia Panel Corporation's newest connector solution, i2 Micro iCon, is ideal for small connector needs. Following the success of VPC's popular rack and panel connector, iCon™, i2 was developed to satisfy the need for an even smaller connector.



The i2 offers a solid state, one piece module receiver in each connector, making it the perfect solution for low I/O applications. The solution will be manufactured to the high quality standards that VPC holds for all of its products.

Features and Benefits

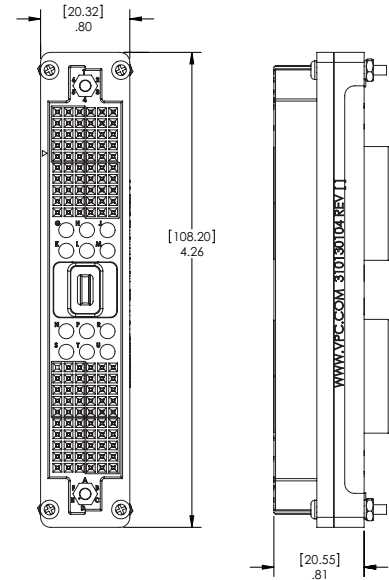
- Rugged engagement mechanism engineered for 10,000 cycles
- Sleek 0.8" footprint
- 120 signal positions available using VPC's QuadraPaddle technology
- 12 micro coax or micro power positions available
- Standard or twin female signal contacts allow PCB mountability
- 60 pin header contains solderless pins and enables direct connection from the i2 receiver to PXI card

- Locking tabs with spring locks ensure even locking and engagement
- Optional keying prevents damage to connectors
- Straight-in locking prevents stubbing of pins
- Easy access to wiring with removable ITA backshell
- Rugged durability withstands drop and vibration testing

i2 Micro iCon Hybrid Receiver

Specifications

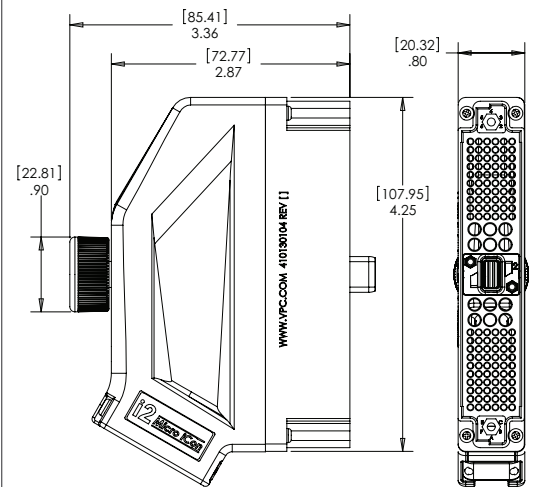
Weight	.25 lbs [.11 Kg]
Frame Material	Glass Reinforced Thermoplastic
Hardware Material	Stainless Steel Alloy
Available Contact Positions	120 Signal, 12 Micro Coax/Power
Cycle Life	10,000 Cycles
Temperature	-55° C to 105° C



i2 Micro iCon Hybrid ITA

Specifications

Weight	.25 lbs [.11 Kg]
Frame Material and Clamp Housing	Glass Reinforced Thermoplastic
Latch Material	Nickel Plated Berillium Copper
Backshell	Glass Reinforced Thermoplastic
Cable Clamp Material	Powder-Coated Aluminum
Available Contact Positions	120 Signal, 12 Micro Coax/Power
Cycle Life	10,000 Cycles
Temperature	-55° C to 105° C



Part

Description

RECEIVERS

310 130 104
310 130 105

Receiver, i2 Micro iCon, 120/12 Position Hybrid, Loaded with 610 138 100 Twin Female Contacts
Receiver, i2 Micro iCon, 120/12 Position Hybrid, for Crimp Contacts

ITA

410 130 104

ITA, i2 Micro iCon, 120/12 Position Hybrid

ACCESSORIES

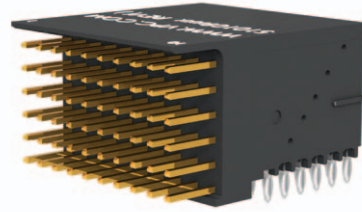
310 113 569
410 112 924

Protective Cover, i2 Micro iCon, Receiver
Protective Cover, i2 Micro iCon, ITA

60 Pin Header

Specifications

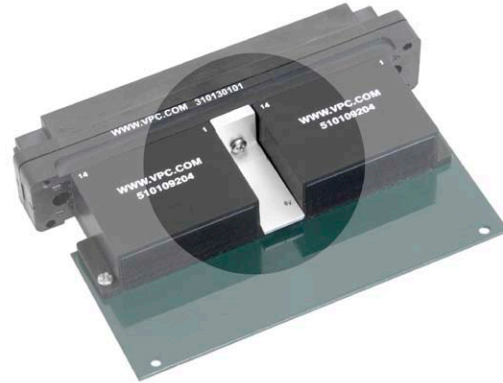
Material - Modules	Thermoplastic
Material - Contacts	Gold-plated phos-bronze
Available Contact Positions	60



Receiver Bracket for PCB Mounting

Specifications

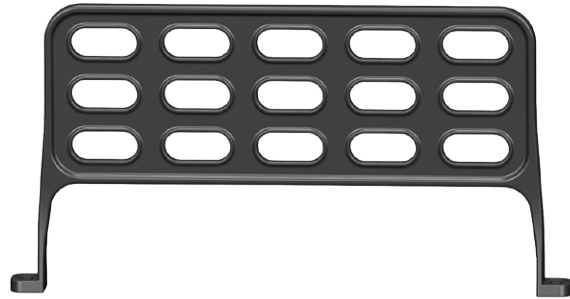
Material	2024 aluminum with a clear chromate finish
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Strain Relief Plate

Specifications

Frame Material	Thermoplastic
Hardware Material	Stainless Steel Alloy
Available Contact Positions	168
Cycle Life	10,000 Cycles
Temperature	-55° C to 100° C



Keying Pins

Specifications

Material	Clear Anodized Aluminum
Temperature	-55° C to 100° C



Part

Description

ACCESSORIES

310 113 461	Keying Pin Kit, iCon, Receiver and ITA
310 113 559	Strain Relief Plate, i2 Micro iCon, Receiver
310 113 562	Bracket, i2 Micro iCon, Receiver, for PCB Mounting
510 109 206	Header, 60 Pin, Right Angle, Solderless

QuadraPaddle Signal Contacts®

Contact Specifications

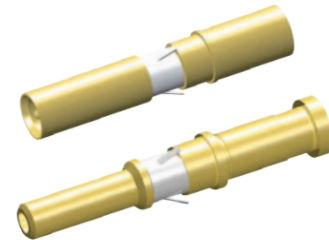
Operating Current & Voltage	5 Amp Max. Continuous; 600 volt Max. use of wire Mil-W-16878/4
Contact Resistance	25 mOhms Max. Measured at 50 mV @ 100 mA
Mating Force	2 oz. Nominal [0.05 Kg]
Dielectric Withstanding Voltage (DWV)	1500 VDC Min.
Insulation Resistance	5000 MOhms Min.
Contact Body Material	Twin Female (RCV) – BeCu Crimp (RCV) – BeCu/PhBrz Male (ITA) – Brass
Contact Plating	30μ" Au over 100μ" Ni
Cycle Life	20,000 Cycles



Micro Coaxial Contacts

Contact Specifications

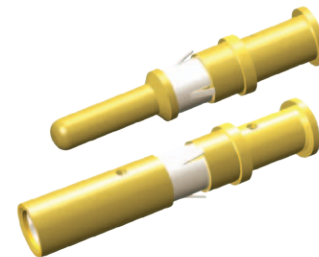
Characteristic Impedance	50 Ohm 75 Ohm • for RG179 50 Ohm • for RG316 double shield
Frequency Range	DC – 3 GHz • 50 Ohm DC – 2 GHz • for RG179 DC – 10.5 GHz • for RG316 double shield
Contact Isolation	–90 dB minimum
VSWR	1.22 @ 3 GHz • 50 Ohm 1.39 @ 2 GHz • for RG179 1.0225 +.05 f(GHz) • for RG316 double shield
Mating Force	1.5 lbs Max. [0.68 Kg]
Insertion Loss	– √f(GHz) x .06 db
Dielectric Withstanding Voltage (DWV)	800 V RMS
Contact Plating	50μ" Au over 100μ" Ni
Cycle Life	10,000 Cycles



Micro Power Contacts

Contact Specifications

Operating Voltage & Current	21 Amp Continuous
Contact Resistance	1.5 mOhms Max.
Mating Force	2.0 lbs Max. [.91 Kg]
Dielectric Withstanding Voltage (DWV)	1500 VDC Min.
Contact Body Material	Brass
Contact Plating	30μ" Au over 100μ" Ni
Cycle Life	10,000 Cycles



Part

Description

QUADRAPADDLE CONTACTS

610 138 200	Signal Contact, Receiver, QuadraPaddle, 5 Amp, Twin Female – Replacement
610 138 216	Signal Contact, Receiver, QuadraPaddle, 5 Amp, 22-28 AWG, Crimp
610 138 109	Signal Contact, ITA, QuadraPaddle, 5 Amp, 22–24 AWG, Crimp/Solder
610 138 112	Signal Contact, ITA, QuadraPaddle, 5 Amp, 26–30 AWG, Crimp/Solder

MICRO POWER CONTACTS

610 142 101	Micro Power Contact, Receiver, 12-14 AWG, Crimp
610 142 102	Micro Power Contact, Receiver, PCB Mount
610 143 101	Micro Power Contact, ITA, 12-14 AWG, Crimp

MICRO COAXIAL CONTACTS

610 140 101	Micro Coaxial Contact, Receiver, RG316, Crimp
610 140 102	Micro Coaxial Contact, Receiver, RG178, Crimp
610 140 103	Micro Coaxial Contact, Receiver, RG179, Crimp
610 140 104	Micro Coaxial Contact, Receiver, RG316 Double Shield, Solder
610 141 101	Micro Coaxial Contact, ITA, RG316, Crimp
610 141 102	Micro Coaxial Contact, ITA, RG178, Crimp
610 141 103	Micro Coaxial Contact, ITA, RG179, Crimp
610 141 104	Micro Coaxial Contact, ITA, RG316 Double Shield, Solder