

Our Most Important Connection is with You.™

# **NSX ARINC 600**

Power and Performance



## NSX (ARINC 600)



Radiall's NSX Arinc 600 series has been used for more than 30 years to connect high performance aeronautical equipment.

To address new challenges, strong competition and changing regulations, Radiall has designed a new generation of Arinc 600 connectors to meet aersopace market demands without compromising performance or reliability.

Radiall's expanded product offering of cost effective RoHS compliant NSX Arinc 600 connectors includes new selectively plated contacts and cost effective inserts. Fully qualified under Arinc 600 specifications and integrated to the widest range of Arinc 600 connectors on the market these lightweight high performance solutions are environmentally friendly and reduce cost up to 20%.

## High performance at a reduced cost

Discover Radiall's wide range of Arinc 600 connectors with proven technology at a reduced cost

#### Drop in replacement with selectively plated gold contacts

With up to 800 size 22 contacts per connector, the first step in achieving connector cost savings while keeping contact removability is to reduce the amount of gold used on non-active areas. Gold Selective Plating provides the same level of conductivity and performance as fully plated contacts while improving price stability.

Offering up to 10% connector savings vs the same connector configuration with standard contacts, this solution is available for replacement of front release, front removable #22 PC tail socket contacts, in 4 standard lengths and on any insert.



1.02 mm length min.

1.27µm gold min.

## Re-designed with monoblock inserts and non-removable selectively plated gold contacts

Taking connector cost savings one step further with a design to cost option. This solution offers new clip-free, monoblock inserts fitted with non-removable contacts. By making the contacts non-removable the manufacturing process is simplified, which reduces connector cost by up to 20% and weight up to 10%.

Available for 100 and 150 insert configurations fully populated with size #22 PC tail socket contacts, in 4 standard lengths.

#### **Key Benefits**

- Mix and match selective plated contacts and cost effective inserts within the same connector provide additional cost savings
- Immediate cost savings without requiring any process change or PCB modification
- Compatible with any connector configuration, including RoHS
- Oualified and fluing since 2012



The insert's unique design support basic movement of the contact inside the cavity to provide mechanical play and ensure the same level of performance than standard Arinc 600 connectors.







## Radiall's re-designed NSX Arinc 600 offers high speed connection and RoHS compliance at a competitive price.

Power and Performance

## A high performance green connector series

Surtec™ 650V is QPL qualified per MIL-DTL-81706B, type II, class 3 and of hexavalent chromium, which is part of substances banned by RoHS directives. This unique solution is fully intermateable with existing Alodine® connectors while maintaining the same level of performance.

Surtec  $^{\text{\tiny{TM}}}$  650 V provides a unique blue-grey coloring which guarantees proper RoHS plating.



#### **Materials & Environmental Performance**

Radiall's complete NSX connector range includes cost savings and RoHS options which meet and exceed Arinc 600 standard requirements.

- Temperature range: 65°C/+125°C
- Temperature life: 1000 hours at 125 °C
- Salt spray: MIL-STD-1344 method 1001.1 test condition B (48 hours)
- Moisture resistance: MIL-STD-1344 method 1002.1 test condition II (10 times 24 hours)
- Sealina: environment resistant to running water (environmental version only)
- Fluid resistance: resistance to MIL-STD-1344 method 1016 (fluids a, e, i)
- Durability: 500 mating and unmating cycles
- Random vibration: conforming to MIL-STD-1344 method 2005.1 test condition 5 letter E. (16.4g, from 50 to 2000 Hz, 8 hours per direction)
- Shock: 50g 11 ms half sine, MIL-STD-1344 method 2004.1, 3 impacts per direction.
- Mating force:
  - connector size 1 : 27 pounds (120 N) max
  - connector size 2 : 60 pounds (267 N) max
  - connector size 3 : 105 pounds (467 N) max

## Wide product range designed for high speed connection

Radiall offers a large range of NSX (Arinc 600) connector solutions.

#### **Optical inserts**



20F12Q8 8#8 Quadrax 12#16 LuxCis



36F36 36 LuxCis



12F12 12#16 LuxCis



17F12Q2 2#8 Quadrax 3#16 Contacts 12#16 Luxcis



62F12 50#22 12#16 LuxCis



12F5C2

#### **Quadrax** inserts



118Q2 2#8 Quadrax 3#16 Contacts 12#16 Luxcis



Q11 11#8 Quadrax



68Q4 4#8 Quadrax 52#22 6#16



11Q2 4#20 3#16 4#12 2#8G



4#12 2#8G



46Q2 40#22 2#16 2#8G



6202 2#8 Quadrax 60#22



6802 2#8 Quadrax 68#22 Contacts 2#16 Contacts



15T6Q2 2#8 Quadrax 7#16 Contacts 6#10 Contacts



2004 20#20 4#8 Quadrax



6#8 Quadrax

### Quadrax - Fiber Optic Adapters

Size 8 Adapters will allow to turn any quadrax cavity into a Fiber Optic link.

#### Quadrax LuxCis Adapters



620946001 Pin FR



620946002 Pin RR



620946003 Socket RR



620946004 Sleeve holder



620946005 Pin RR



EN 4531-101 for Quadrax size 8 cavity

620946006 Socket RR

#### Backshell

Whether it's a need for strain relief or EMI shielding, Radiall's new NSX Arinc 600 backshells compliments the comprehensive range of existing Arinc 600 connectors.

- Available for size 1, 2 and 3 connectors,
- Unique adapter plate allows for a perfect adaptation on your Arinc 600 connector
- Standard round output or cable clamps available.





It's not just a slogan. It's a statement of our earnest desire to put you at the forefront of all our business practices. As part of Radiall's mission to be available and accessible, we make it a priority to have local offices around the globe ready and able to assist you – wherever you are, whenever you need us.

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