

Space Grade MIL-STD-1553B Data Bus Components

Product Facts

- High packaging density and weight savings
- Design flexibility
- Complete line of space qualified MIL-STD-1553B components
- Low outgassing levels that meet NASA requirements
- Rugged construction
- Factory built harnesses eliminate unnecessary splices and connectors, reducing the cost and increasing the reliability of the networks
- Factory built harnesses are pre-tested to customer requirements and are ready for installation



A complete system of interconnection hardware for MIL-STD-1553B networks

Complete collection of components include:

- A wide selection of in line couplers
- Data bus cables
- Triax connectors and contacts with strain relief

- One-piece triaxial contacts for MIL-C-38999 connectors
- Bus and stub terminators
- Low outgassing components for use in space
- Cable identification sleeves
- Harness design software using HarnWare software
- Flexible cable splices

Applications

Used in MIL-STD-1553B multiplexing space applications

Flight control for:

- Launch Vehicles
- Satellites
- Human Spacecraft
- Cargo Spacecraft
- Deep Space Probes

Specifications

Meets TE Specification D-6022 for space-grade data bus components.

Note: TE is a major supplier of space data bus products to a number of space equipment OEM's.

Available in:

- | | |
|--------------|---|
| Americas | ■ |
| Europe | ■ |
| Asia Pacific | ■ |

Space Grade MIL-STD-1553B Data Bus Components (Continued)

Components



In-Line Couplers and Terminators

- Tin/Nickel-plated metallic parts
- Baked silicone rubber components
- Low out-gassing tubing
- D-500-94XX-X-XXX series for couplers
- D-500-9463-XXX series for terminators



Threaded Triaxial Connectors

- Tin/Nickel-plated metallic parts
- Baked silicone rubber components
- Low out-gassing tubing
- DK-621-0911P
- DK-621-0911S
- DK-621-0912P
- DK-621-0912S



Bayonet Triaxial Connectors

- Tin/Nickel-plated metallic parts
- Baked silicone rubber components
- Low out-gassing tubing

“A” Polarization

- DK-621-0933-1P or S
- DK-621-0934-1P or S

“B” Polarization

- DK-621-0935-2P or S
- DK-621-0936-2P or S

“C” Polarization

- DK-621-0937-3P or S
- DK-621-0938-3P or S

“D” Polarization

- DK-621-0939-4P or S
- DK-621-0940-4P or S



Splice Kits

- Flux-coated, solder impregnated copper shield braid encased in a transparent heat-shrinkable insulation sleeve provides a controlled soldering process, encapsulation, inspectability, strain relief and insulation
- D-150-9708-5



Standard Space Cables

- Optimized single shield
- S16 = 7724S1664-9
- S1L = 7724S1LL4 LF*

*LF = Low Fluoride

EMP Hardened

- S86 = 7724S8664-9
- S8L = 7724S8LL4-9 LF

Optimized Double Shield

- S36 = 7724S3664-9
- S3L = 7724S3LL4 LF



Demateable Terminators

- Available with and without lanyard
- DK-621-0937
- DK-621-0938
- DK-621-0939
- DK-621-0940
- DK-621-0933
- DK-621-0934
- DK-621-0935
- DK-621-0936

TE also manufactures complete harnesses to customer specifications and print.

Space Grade MIL-STD-1553B Data Bus Components (Continued)

Space-Grade In-Line Coupler Part Numbering System

D-500-94 W W -X -YYY -ZZZ

Cable Length

012 = 12 in
078 = 78 in
079 = 79 in
120 = 120 in
236 = 236 in
240 = 240 in

Cable Type

41L = 7724S1LL4 (24 AWG single optimized shield)
43L = 7724S3LL4 (24 AWG double optimized shield)
48L = 7724S8LL4 (24 AWG EMP hardened)

Number of Stubs

1, 2, 3, or 4

Design

5 = Without internal terminator
6 = Same as 5 but with reverse bus
7 = With internal terminator
8 = Same as 7 but with reverse bus

Style

5 = Without mounting eyelet
6 = With mounting eyelet

Space Grade MIL-STD-1553B Data Bus Components (Continued)

Space-Grade Connectors Part Numbering System

DK-621 -09 XX -X X

Contact (installed, DK-621 kits only)

P = Pin*

S = Socket*

*May be ordered separately as D-602-0126 (pin)
and D-602-0127 (socket)

Polarization (bayonet styles only) (jack view)

1 = A



2 = B



3 = C



4 = D



Basic Connector Configurations

Threaded styles:

11 = Plug

12 = Jack

Bayonet styles:

33 = Plug, A polarization

34 = Jack, A polarization

35 = Plug, B polarization

36 = Jack, B polarization

37 = Plug, C polarization

38 = Jack, C polarization

39 = Plug, D polarization

40 = Jack, D polarization

D-621 Connector, Kitted with Accessories

Space-Grade Terminators Part Numbering System

D-500-9463- ZZZ

Cable Type

41L = 7724S1LL4 (24 AWG single optimized shield)

43L = 7724S3LL4 (24 AWG double optimized shield)

48L = 7724S8LL4 (24 AWG EMP hardened)

Space-Grade Splice Kit = D-150-9708-5