ARINC 818 SWITCHES

VIDEO SWITCHING IN REAL-TIME

TECHWAY
SIGNAL VISION SYSTEM

Easy-routing of ARINC 818 video

APPLICATIONS

- Laboratory test equipment
- Test bench
  - Production
  - Qualification
  - Certification
- ARINC 818 R&D support, prototyping

BENEFITS

- Ready-to-use :
  - Stand-alone use
  - Rackable
- Easy-to-use :
  - Monitoring and command via Ethernet
  - Easy configuration
  - TECHWAY support
- Real-time
- Low-latency switching
- Low propagation delay
- Switching virtualization capability

SPIDER
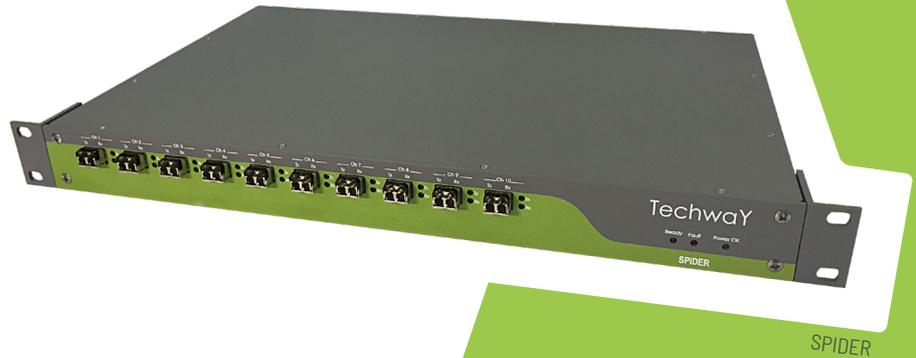
TECHWAY (France) & Great River Technology (USA) have join forces to offer a wide range of ARINC 818 switches designed to simplify multi-destination and multi-source architectures.

The ARINC 818 switches are built on the FPGA technology associated with optical interfaces with very high density. All the switches ensure that video frames remain intact and void of corruption during switching.

SPIDER is compliant with ARINC 818 Supplement 2 and supports link rates up to 6,375 Gbps. These solutions are ICD independent, the link rate and virtualization configuration are set at the order.

These switches are used on major aircraft equipment programs.

AVIONICS

DEFENCE

SPIDER	PANTERA
• 10 incoming optical links • 10 outbound optical links • Link rates up to 6,375 Gbps	• 4 incoming optical links • 4 outbound optical links • Link rates up to 4,25 Gbps

• Separate virtual switches configuration with independent link rates
  • 10x10
  • 8x8 + 2x2
  • 6x6 + 4x4
	• 4x4

• SNMP service for ATP • Web server	• Web server
• Unicast, multicast or broadcast transmission • Monitoring and control through common Web browser • Real-time monitoring and error counter	

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FEATURES

- Link rate available : 1.0625, 2.125, 3.1875, 4.25, 6.375 Gbps
- Optional test pattern (on demand)
- ARINC 818 Supplement 2 compliant
- Real-time link monitoring and error counter
- Cmd/Ctrl by Web server or SNMP
- Low-latency switching
- Unicast, multicast and broadcast

SPIDER SPECIFICATIONS

- Switch control 10/100BaseT Ethernet
- 10 inputs and 10 outputs channels
- Embedded SNMP v3 and Web server
- Several virtual configurations (10x10 or 4x4+6x6 or 2x2+8x8)
- Power supply (120V - 240V) and DC (48V and 28V)
- LC optical connectors (850nm)
- 1U 19" rack format

PANTERA SPECIFICATIONS

- Switch control 10/100BaseT Ethernet
- 4 inputs and 4 outputs channels

ENVIRONMENTAL INFORMATION

- Operating temperature range :
  - 0°C to 50°C
- Storage temperature range :
  - -55°C to 125°C
- CE mark

### ORDERING INFORMATION

- **SPIDER2_A818**
  ARINC 818 Switch, 1U 19" rack, 10 inputs/10 outputs up to 4,25 Gbps

- **SPIDER3_A818**
  ARINC 818 Switch, 1U 19" rack, 10 inputs/10 outputs up to 6,375 Gbps

- **SPIDER_WARRANTY_EXT**
  Annual warranty extension for SPIDER

- **PA-A8-XX-XX-XX**
 ARINC 818 Pantera Switch, 4 inputs/4 outputs up to 4,25 Gbps

PANTERA

CONFIGURATION

10x10 switch configuration :
All inputs / outputs have the same link rate

COMPUTER Remote Access — SNMP — WEB server — Ethernet Link

Optical Inputs
OPTICAL SWITCH
Optical Outputs
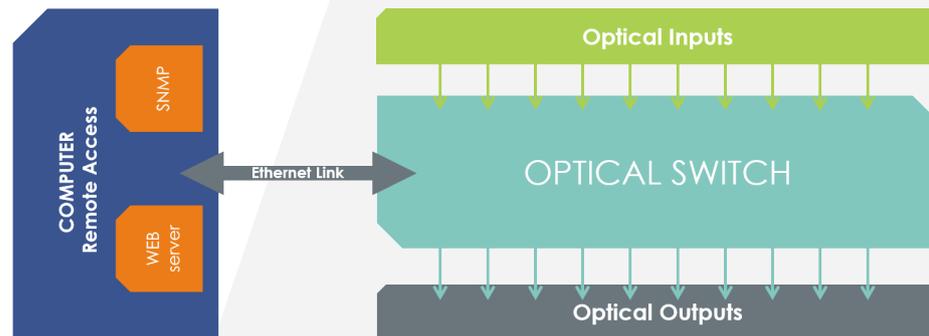
Switch virtual configuration :
Virtual switch A uses a link rate different than B

COMPUTER Remote Access — SNMP — WEB server — Ethernet Link

Optical Inputs
Virtual switch A 4x4 | Virtual switch B 6x6
OPTICAL SWITCH
Optical Outputs
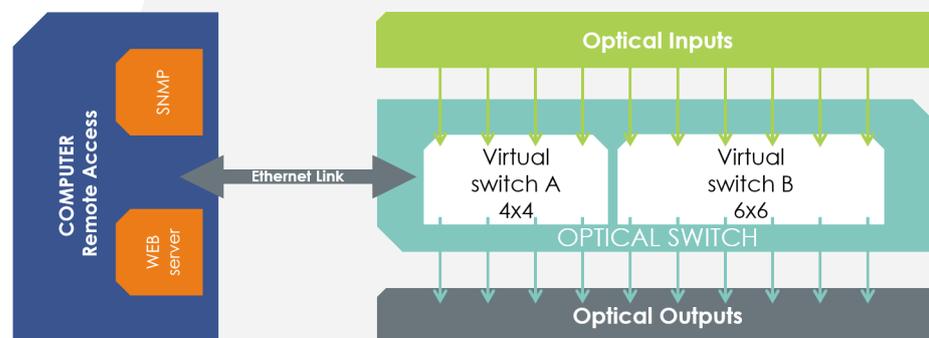
For example, virtual switch A rate is 1,0625 Gbps and virtual switch B rate is 3,1875 Gbps

Information and photos subject to change without notice