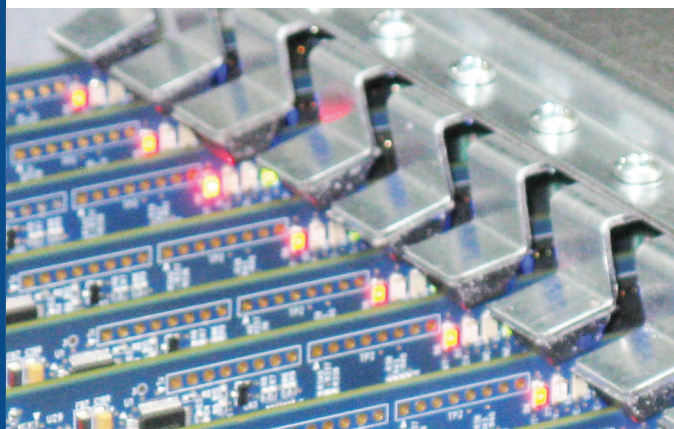




Titan

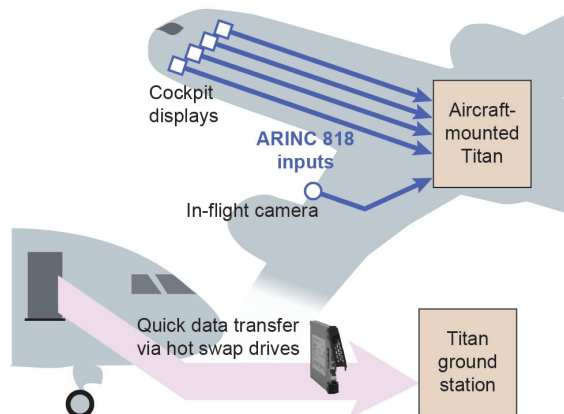
ARINC 818 Systems and Recorders

Titan Series rugged systems deliver unprecedented capacity for demanding ARINC 818 applications. They include multiple GRT Matrix PCIe cards that match your ARINC 818 interfaces. GRT will configure one of four base systems to meet your needs.



Applications

Flight testing: During flight, record multiple channels of ARINC 818 video for later analysis. GRT can acquire Safety of Flight certification, based on customer requirements.



Simulation of ARINC 818 systems: Render cockpit display graphics on DVI and use Matrix PCIe cards to convert from DVI to ARINC 818. Alternately, Matrix cards can be factory configured to convert live video from ARINC 818 to DVI.

ATE testing: Use multiple ARINC 818 channels to test video sources and cockpit displays in production. Transmit test patterns and/or live video.

How to buy

Titan systems are configured to customer spec. Not all systems have all features. Place orders in three parts:

1. **Base system:** All are housed in rugged 19-inch chassis.

- **TI-01, TI-04:** Multi-channel record/playback system. Record uncompressed or compressed ARINC 818 channels, each up to 400 MB/s, using StreamPix 6. Primary drive capacity starts at 500 gigabytes, and removeable recording drives can store 4 to 24 terabytes, per customer specification.
- **TI-02:** Development PC preloaded with customer-specified functions and up to 8 cards. Its primary drive capacity starts at 500 gigabytes for testing 1 to 8 ARINC 818 channels.
- **TI-03:** This multi-channel converter powers up autonomously with no user interaction required. Factory configured to convert ARINC 818 to DVI or DVI to ARINC 818 using up to 16 cards.

2. **GRT Matrix card(s):** Order Matrix PCIe cards matching your ICD. See our datasheet [Matrix Series 818 Cards](#).

3. **Options:** See "Features, functions, and options," next page.

To order, consult our Distributors page:

<http://www.greatrivertech.com/distributors.html>.

If no distributor is listed for your region or country or if you need additional information about our custom firmware, contact our Albuquerque headquarters.

Features, functions, and options

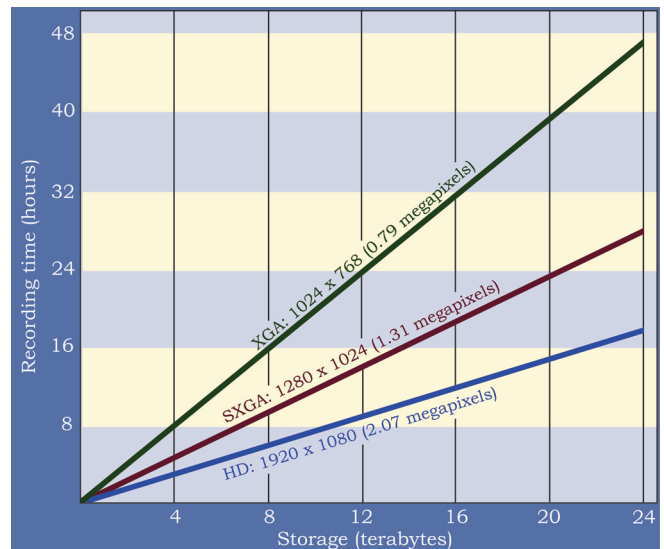
Where applicable, Titans include Matrix MultiCard, software that enables easy control of multiple ARINC 818 channels through an intuitive GUI. You can also order an optional Xf Tuner, a card and application that serves as a universal ARINC 818 video generator. Use Xf Tuner to adjust protocol parameters in real time.

All models are versatile systems that can be factory loaded with multiple Matrix PCIe cards ordered separately to match your ICD and selected functions:

- Intel i5, i7, XEON single or dual processors
- 4U (TI-01, -02), 5U (TI-03, -04) chassis
- SSD/HDD primary 160 GB to 500 GB
- SSD/HDD storage 4 TB to 24TB
- Configurable drive bays
- Protocol analysis
- Robustness testing
- ARINC 818 to DVI or VGA conversion
- DVI to ARINC 818 conversion
- Video capture to ARINC 818, DVI, VGA, or GUI
- 1U 20" deep rack mount LCD/Keyboard Drawer
- RAID support (TI-01, -04)

- ARINC 818 video recorder (TI-01, -04)
- Video compression H.264, M-JPEG (TI-01, -04)
- GPS/GLONASS IRIG/B (TI-01, -04)
- Time stamping (TI-01, 04)

Titan systems are build with server-class chassis and cooling fans for increased longevity.



Maximum recording time (one active channel, 24-bit color, 60 Hz, uncompressed) for all GRT recorders.

Compare GRT systems and recorders

Europa

Small form factor single-function or dual-function system



Callisto

Medium form factor in tower, rack, or rugged chassis.



	Europa	Callisto	Titan
Capacity			
Cards*	1-2	1-4	1-16
ARINC 818 channels	1-2	1-4	1-16
ARINC 818 recording channels	1	1-4	1-8
Terabyte storage	1-2	1-12	10-24
Venues			
Cockpit simulation labs		✓	✓
Engineering development	✓	✓	✓
Qualification testing	✓	✓	✓
Flight tests	✓		✓
Factory production		✓	✓
Maintenance and repair		✓	✓
Flight simulators/pilot training			✓
Options (availability depends on configuration)			
Video capture to GUI	✓	✓	01, 04
Video conversion (DVI)	✓	✓	all
Video record/playback	✓	✓	01, 04
Video playback		✓	01, 04
Video generation	✓	✓	all
Protocol analysis	✓	✓	02
Robustness testing	✓	✓	02
Remote control	✓	✓	01, 02, 04
Compression		✓	01, 04
Data removal (to ground station)		✓	01, 04

*Total number of Matrix, GPS, RAID, video, audio, and Xf Tuner cards.