TELEDYNE CONTROLS
Everywhereyoulook™

NFS Network File Server

High-Performance Onboard Connectivity on your Aircraft and across your Fleet

PART NUMBER -2247200-01

Teledyne Controls' Network File Server (NFS), a key component of Boeing's Onboard Network System (ONS), functions as a stand-alone server to provide a common, compact, non-essential, high-performance onboard network solution. The NFS facilitates data transfer between avionics systems and IP-based equipment, providing greater accessibility to a wide range of applications. This high-reliability device, built to OEM standards, combines in one single and lightweight unit the multiple functions of an ARINC 429/717/Discrete to Ethernet converter, a multicast router, a firewall, a data loader and a communication gateway.

Extensive Networking Functions

The NFS is designed to support extensive networking infrastructures. It connects previously isolated onboard systems and sub-networks with various Ethernet wired interfaces, while enforcing network security with its firewall functionality. It can also manage Quality of Service (QoS), allowing operators to prioritize traffic for critical applications.

Flexible Communication Gateway

Off board communication is also available through the NFS as the system can interface with a variety of communication systems and high-speed links to provide connectivity between the airplane and the airline's ground networks.

ARINC 615-4 and ARINC 615A Data Loading

The NFS replaces the Airborne Data Loader as it provides full 615-4 and 615A data loading capability. This allows operators to streamline their data loading processes by eliminating the need to reproduce, distribute and load countless floppy disks every month.

Application Hosting

Teledyne's NFS can host a range of existing applications, such as Engine Trim Balance, Weight and Balance, Log Book and virtual QAR, to perform a variety of tasks for installed systems. The NFS also provides a software framework that enables airlines to develop their own applications to access NFS based features and services.

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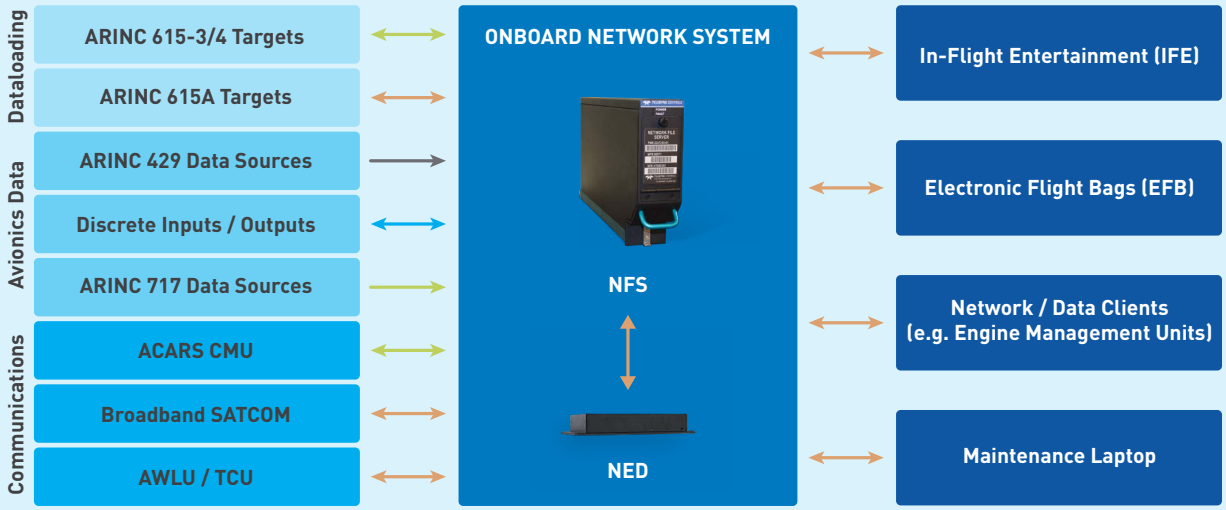

NFS Interface Block Diagram

Key Features:

- Designed to Boeing OEM standards
  - Standard on Boeing 737 MAX and 777
  - Available on Boeing 737 NG
- Network management
- ARINC 429/717/Discrete to Ethernet converter
- Switch and Router functions
- PPPoE network protocol
- Port mirroring
- Extended networking with multiple NFS and NEDs
- 615-4 and 615A data loading
- 615A loadable (over Ethernet)
- ACARS interface
- IP communications management
- ARINC 429 avionics interface (including label re-transmission)
- ARINC 717 input
- Airplane discrete interfaces
- Ethernet interfaces (fiber optic and quadrax)
- ARINC 818 HD video output (fiber optic)
- Front removable SD Card storage
- Front Panel Access for 1GB Ethernet, USB 3.0/2.0, and HDMI ports

Characteristics:

- Intel® Core™ i7 Server Subsystem Processor
- 8-16GB DDR3 RAM
- Up to 1TB Solid State Disk (SSD) storage
- 1x 10Gb fiber optic Ethernet rear port
- 4x 1Gb fiber optic Ethernet rear ports
- 3x 1Gb quadrax Ethernet rear ports
- 13x 10/100Mb quadrax Ethernet rear ports
- 2x 3Gb fiber optic ARINC 818 HD video rear ports
- Size: 2 MCU case per ARINC 600 15.1” L x 2.27” 7.62” H (383 mm x 57 mm x 193 mm)
- Weight: 7.7 lbs / 3.5 kg
- Power: 69 watts max at 115VAC 400Hz
- Cooling: 11 kg/hr minimum air flow per ARINC 600
- Meets DO-160E category A2 environment