

# NFS Network File Server

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

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.



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### 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

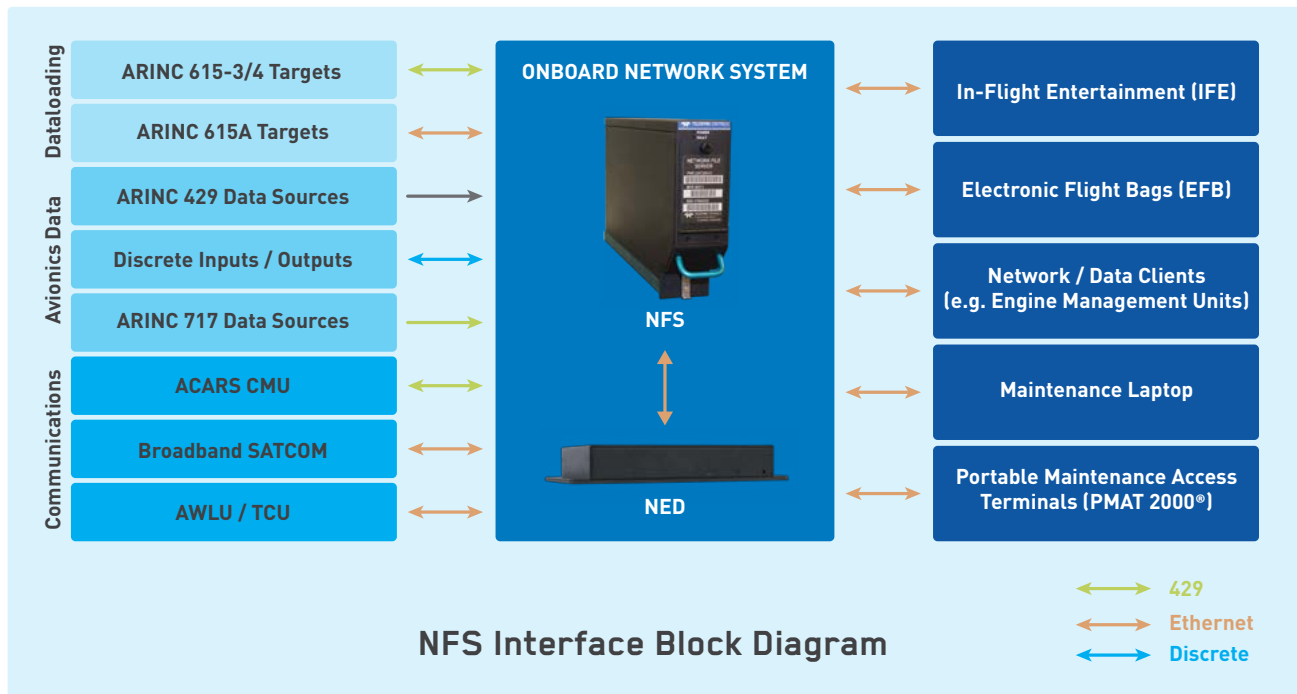
Off board communication is also available through the NFS as the system can interface with a variety of communication systems and high-speed links to provide connectivity between the airplane and the airline's ground networks.

### 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.



## Key Features:

- Designed to Boeing DEM 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