



16333-B Raymer Street  
Nuys, CA 91406

[www.eoninstrumentation.com](http://www.eoninstrumentation.com)  
ISO9001:2015/AS9100D #C2015-02333  
818-781-2185

3800 Oceanic Drive, #112 Van  
Oceanside, CA 92056

## Product Data Sheet - High-Speed Dual-Redundant DisplayPort Active Switcher/Converter

Model Number: DP-25 P/N:

Eon Instrumentation developed the first high-speed dual-redundant DisplayPort active switcher/converter for NASA to use on their new X-59 QueSST program. The DP-25 unit has two DisplayPort 2160p60 inputs that are actively switched to one DisplayPort 2160p60 output with mirrored outputs of SDI 2160p30 (x1), SDI 1080p60 (x2), and NTSC (x1). The main video PCB receives the redundant DisplayPort signals with input 1 set as primary and detects any loss of this primary signal before immediately switching to backup input 2. In order to process this change quickly enough to keep the end-user monitor from losing signal, Eon developed firmware for the internal FPGA to send a test pattern for the sub-millisecond switching time in order to keep a sync signal on the monitor. In parallel to this active switching DP output, the unit also converts the output to mirrored 6G-SDI, 3G-SDI (x2), and NTSC outputs for secondary monitor and recording purposes. The ADV-DP-25 unit is fully qualified to Environmental and EMI MIL specs DO-160, 461, 704, and 810.



*NASA's X-59 QueSST (Left) and Eon's ADV-DP-25 (right)*

### About Eon Instrumentation – Since 1961

Eon Instrumentation Inc. is a veteran owned multi-million dollar business that designs and manufactures military qualified products for airborne, shipborne, and ground vehicle platforms. These products include Analog and High Definition Digital Video Systems (splitters, converters, selectors, cameras, monitors and recorders); Interference Blanker Units; Rugged Power Supplies; Audio Amplifier Systems; and System Engineering Programs. Eon offers a wide variety of off-the-shelf products as well as engineering expertise to tailor standard products to meet specific customer needs and to develop new products for emerging requirements. Eon is also a certified FAA repair station.

Eon partners with our customers to deliver end results. Eon will often invest its internal R&D funds to create or tailor existing hardware and software to create unique products or systems. The key ingredient of Eon is a mix of carefully selected staff of technical, manufacturing and business development specialists, adept at working as a team. That team is driving Eon revenues 10 -20% per year since 2016.