# **DESSC** Diagnostic Engine Starting System Controller



The **DESSC (Diagnostic Engine Starting System Controller)** is an all digital replacement for the original Engine Starting System (ESS) controller of the F-16 aircraft providing an improved Jet Fuel Starter (JFS) control logic and powerful diagnostic capabilities.

The **DESSC** significantly improves the engine starting system performance and reliability while increasing flight safety and availability, with the additional benefit of reducing the ESS maintenance efforts and costs.

The **DESSC** is a mature and proven solution, which is in operational service onboard more than 1,500 F-16 aircraft operated by several Air Forces worldwide, including the USAF, and is fully qualified by Lockheed Martin and USAF.

#### **Technical Data**

- Dimensions: (HxWxL) 5.0" x 4.1" x 10.1" (128x103x268)mm
- Weight: 4.8 lb (2.2 Kg)
- Qualifications: MIL-STD-810, MIL-STD-46 and MIL-STD-704
- Power Consumption: 7 W
- MTBF of over 15,000 flight hours

#### **Benefits**

- Improved mission readiness and availability of the aircraft
- Improved engine starting performance
- Enhanced flight safety
- Reduced maintenance effort and cost
- Auto-recording of all engine starts for in-depth diagnostics
- Improves fleet availability and reduces fleet operation costs



### **Main Features**

- Improved engine starting algorithms provide successful engine starting on first attempt on-ground and in-flight.
- Qualified by Lockheed Martin and USAF for both the Pratt & Whitney F-100 and the General Electric F-110 engines
- > Simple Flight-Line retrofit No aircraft modifications required.
- Advanced BIT (Built-In-Test)
- > Diagnostics provides automatic fault isolation at component level of the whole starting system
- > Auto recording of the last 9 engine starts for in-depth diagnostics.
- Monitoring and recording of JFS exceedances
- > Immediate unit fault detection upon power turn-on
- 'Soft" clutch engagement
- Flight-Line Test Equipment Utilizing a laptop or a PDA unit
- > DESSC NSN 2925-01-436-7325
- > LM P/N 16VP100-120
- > RSL P/N AY35713229

# Additional RSL systems for F-16



ABC Advanced Brake Controller



DFMC Diagnostic Fuel Management Controller

## **COMPANY PROFILE**

RSL Electronics USA Inc. designs, develops and manufactures state-of-the-art control and diagnostic solutions for defense and aerospace applications.

The wide range of systems offered by RSL includes airborne utilities and control systems as well as airborne Health and Usage Management Systems (HUMS). These are used in conjunction with turbo-jet, turbo-shaft & turbo-prop engines, fuel systems, and electrical power systems.

RSL maintains a strict quality assurance policy and is an approved supplier for the Israeli Air Force, the U.S. Army and Air Force, the Korean Air Force, the Japanese Air Force, Lockheed Martin, Israeli Aerospace Industries and many others.



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