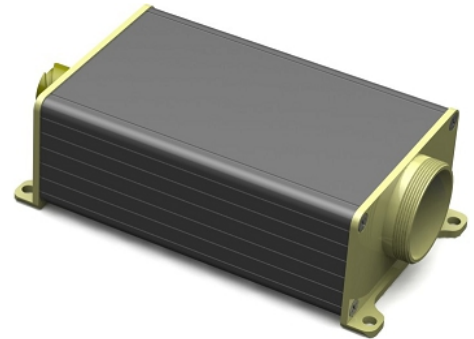


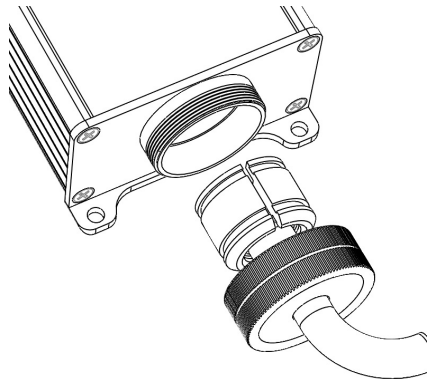
Features

- Drives low voltage surface discharge spark plugs (igniters)
- Made for simple retrofit to Walter M601 gas-turbine engine
- Provides solid-state solution – no air-gaps and no points
- Generates constant spark rate independent of operating voltage
 - full spark rate during first 30 seconds for start mode
 - lower spark rate thereafter for continuous operation
- Simple built-in check during first second of activation provides feedback on the physical condition of the igniter plug
- Operating voltage range from 10 to 30 VDC with transient and over-voltage protection according to MIL-STD-704E
- Internal electrical parts are encapsulated for harsh environment operation



Description

The TEX-1 turbine exciter is designed to drive the ignition system on the Walter M601 gas-turbine engine. It supports the same connector, ignition leads and spark plugs as the old LUN 2201.03-08 units which most of them originally came out with.



As far as spark generation go, the TEX-1 provides the exact same electrical impulses that these older units supply, but where these older units need regular adjustment of their air-gaps and points to ensure pulses to igniters remain within specification, the TEX-1 does not suffer from this drawback. The TEX-1 does not employ any points or air-gaps, but instead uses new solid-state technology to drive igniters to spec without needing any adjustment whatsoever.

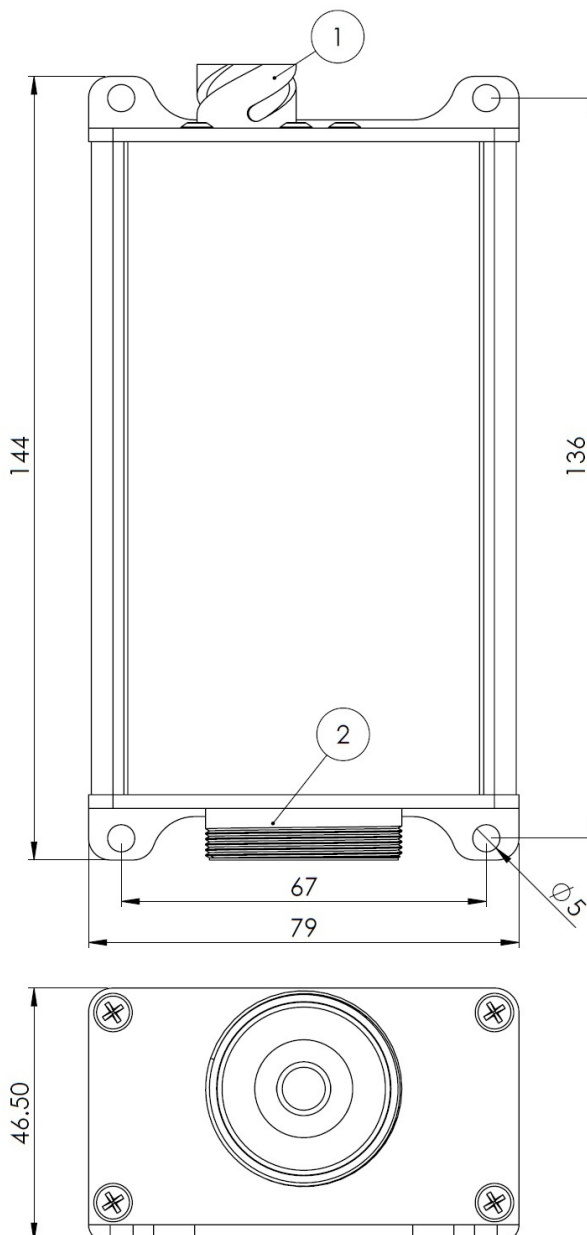
Harnessing technological advances further, we were able to incorporate additional benefits into our ignition exciter. The TEX-1, for example maintains a constant spark rate independent of operating voltage, where the same cannot be said of the LUN 2201.03-08 unit. With the latter the variation from the nominal rate is as much as -42% during start-up and +20% in-flight, which runs counter to what is actually desired both in terms of starting and in-flight continuous operation. We have therefor also made the TEX-1 provide full spark rate (4 sparks per second) for the first 30 seconds of activation where-after the rate is automatically lowered in order to reduce wear on the ignition system overall, but specifically the igniters.

We have also included a simple igniter test feature that executes during the first second after activation. By listening and counting the sparks until a brief pause (one spark is skipped), the user can obtain quickly on a scale of 1 to 3, feedback on the physical condition of the igniter plug – 3 being the best.

More information on the TEX-1 can be obtained through its operational and installation manual.

General Specifications

1	OPERATING VOLTAGE	10 to 30 VDC, transients and surges to MIL-STD-704E
2	STORAGE TEMPERATURE	-55 TO +125 °C
3	OPERATING TEMPERATURE	-50 TO +105 °C
4	MAX OPERATING ALTITUDE	55,000 feet
5	WEIGHT	455 gram (1.0 pound)
6	MAX POWER CONSUMPTION	0.6 Amp (full spark rate)
7	SPARK RATE	4Hz for start, 2Hz thereafter



1. The TEX-1 mates with a 97B-3106A10SL-4S connector. We can supply this connector with its cable clamp as a kit if required.

PIN-OUT	
PIN A	POSITIVE (POWER)
PIN B	NEGATIVE (GROUND)

2. The TEX-1 mates to the same connector as the LUN 2201.03-08 ignition source that normally comes with your engine.
3. Mounting the TEX-1 is done via four 5mm holes in the unit as depicted. AN-3 bolts can be used to fix the unit to the proper engine bracket.