

RF Q-Switch Driver – QSD Atto

Features:

- ✓ 2.5 Watts Output
- ✓ 20MHz- 460 MHz
- ✓ 24 V Industrial supply input
- ✓ Power setting 25mW...2.5 W
- ✓ Mismatch tolerant
- ✓ **F**irst **P**ulse **S**uppressor
- ✓ Temperature compensation
- ✓ Thermal overload protection
- ✓ Slim case style
- ✓ Over voltage and current protection
- ✓ Status monitoring



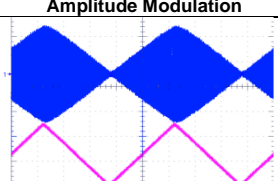
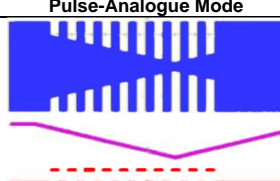
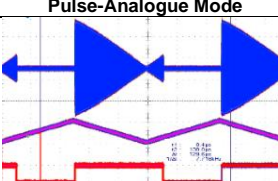
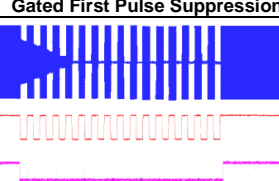
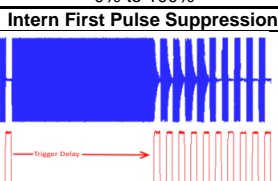



Application:

The **QSD-Atto** RF driver is specially designed for **Acoustic Optics Modulators** and **Q-Switch** applications. Due to its sophisticated technology with the latest electronic components makes this miniaturized design possible. With these small dimensions it is particularly recommended as an ideal device for small industrial, medical and scientific LASERs

General:

The **QSD Atto** is a slim RF transmitter module with implemented pulse and analogue modulation options. The unit has exceptional power density over a wide frequency range. An embedded and configurable automatic **F**irst **P**ulse **S**uppression provides a fast and versatile engraving system solution. The defined unit-to-unit setting provides excellent performance stability that covers a wide range in laser marking application. This very small and light transmitter delivers up to 2.5 watts into a 50Ω load with excellent purity, fast modulation and enormous contrast dynamic range.

Properties:

 <p>External Analogue 0% to 100%</p>	 <p>External Gated Analogue 100% Power to Analogue</p>	 <p>External Gated Analogue 0% to Analogue</p>	 <p>Internal Ramp Generator</p>
 <p>Burst Trigger Automatic</p>	 <p>Adjustable Trailing</p>	 <p>Full Device Control and Setup</p>	 <p>Programming and Remote</p>

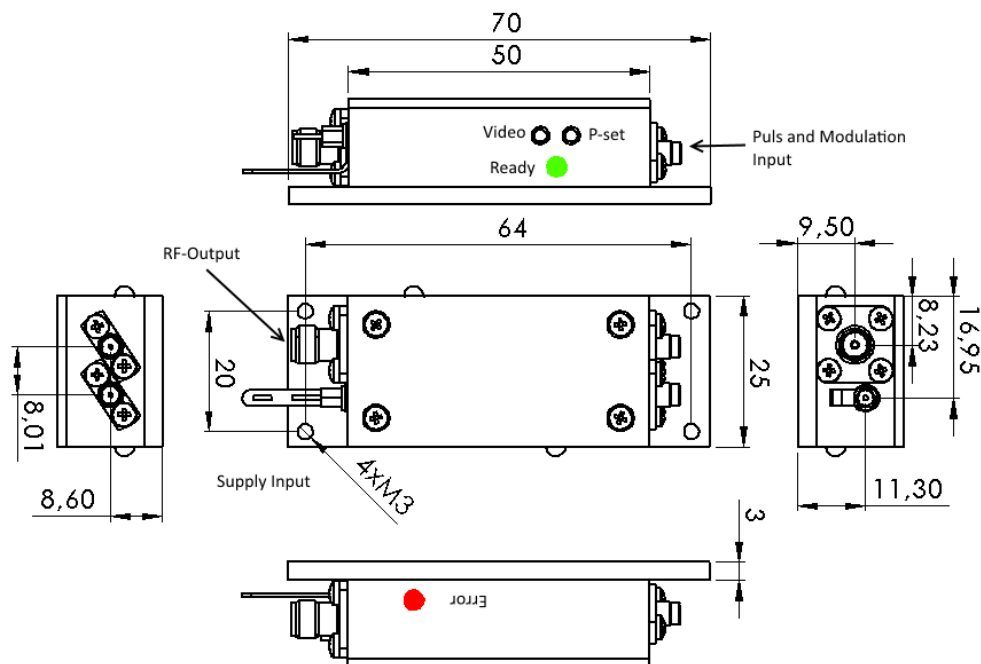
Controls: Gain setting due user accessible potentiometer.
 Options: An optional heat sink and fan are available on request.
 Accessories: RF-Cable and adaptors /power supply/power splitter-Combiner

Specification:

Electrical	Min	Max	Unit
Output power (into 50Ω)	20	2.500(@50Ω)	mW
Power setting range	20	3000	mW
Power supply	23,5	24,5	V
Input current	0.6	0.7 @2W-50Ω	A
Power loss	12	14	W
Maximum permissible VSWR for 2 W output		2.0	-
Frequency	20	460	MHz
Harmonic distortion	-40		dBc
Output impedance	50		Ω
Output connector SMA ,SMB	Female		-
Modulation input impedance		50/75/600	Ω
Modulation input SMA,SMB		SMA,SMB Female	
Input impedance	50/75/600	Ω	
Digital input	LVTTL	TTL	
Dynamic			
Rise / Fall 10/90	3 @ (400MHz)	12 @ (40MHz)	ns
Dynamic RF ON / OFF ratio	40	52	dB
Digital	70	100	dB
Thermal			
Temperature drift	-	+/- 0,01	W/K
Time to reach stability		300	s
Ambiance / Installation / Transport			
Cooling : Conductive - through base	5	+55	°C
Thermal shut down trip threshold		60	°C
Storage temperature	-20	+125	°C
Transport temperature (temporary)	-20	+150	°C
Relative humidity in storage		90	%
Ambient temperature	+5	+75	°C
Relative humidity during operation		75	%
Ambient conditions	Atmospheric, room air 3000m above sea		
Body dimensions L x W x H		50x25x15	mm
Weight		90	g

Specification ratings are based on measurements in a 50 Ω system.

Dimension: (mm)



Subject change without notice V10_R16