

RF Q-Switch Driver – QSD Maxi

Features:

- ✓ **200 Watts Output**
- ✓ Split option with 0° phase 2x80Watt@50 Ω
- ✓ 24 V Industrial supply
- ✓ 24 MHz- 46MHz
- ✓ Analogue modulation
- ✓ Digital pulse control
- ✓ **F**irst **P**ulse **S**uppression
- ✓ Serial bus interface RS-232 /RS485/CAN
- ✓ Configuration software
- ✓ Status monitoring an power metering



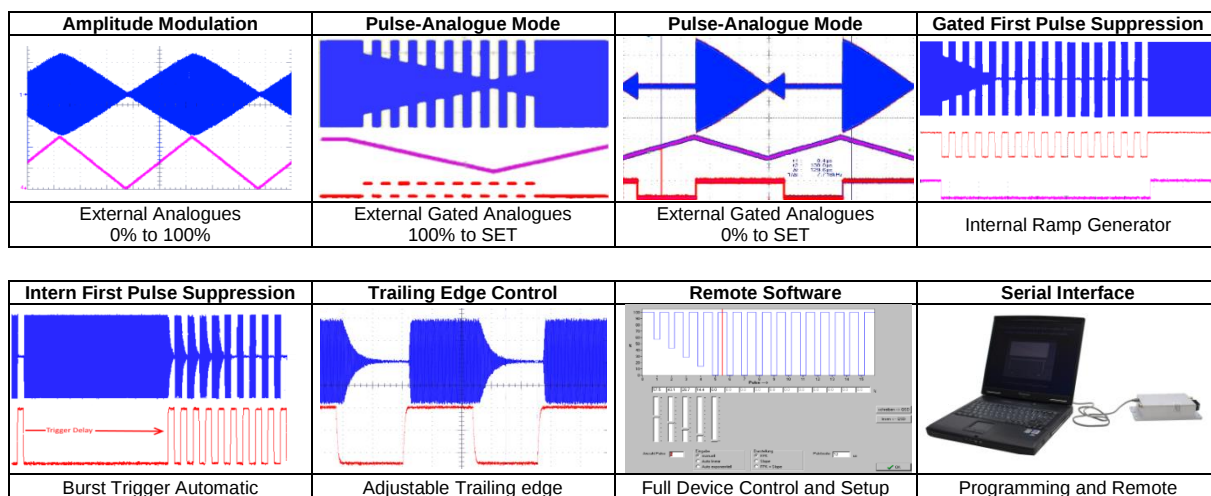
Application:

This high-power RF driver is designed for the control of **Acoustic Optical Modulators** and **Q-switch** application. Above all, it is in use for double Q-switch machines or in high-power laser systems. Its unique robust design is the basis for long-term use in harsh environment.

General:

QSD-Maxi is a **Q-Switch** driver module with built-in digital pulse and analogue modulation. It can supply 200 watts to a single 50 Ω load. It is also available with a dual output option, which can control two loads with 0 ° up to 80 watts. Both outputs have an independent power setting. An internal microprocessor controlled and programmable **F**irst **P**ulse **S**uppression enhances the versatility and flexibility for many tricky applications. Another popular application is the mixed analogue / digital mode. In this case, an applied analogy signal changes the RF power and an external switching signal switches to full RF power or to the idle state on command . Therefore, the RF output is determined by the combination of both signals. A simple analogue modulation is also suitable. A serial interface communication enables full setup configuration and remote control of the device. Typical signals see below.

Properties:



Controls:

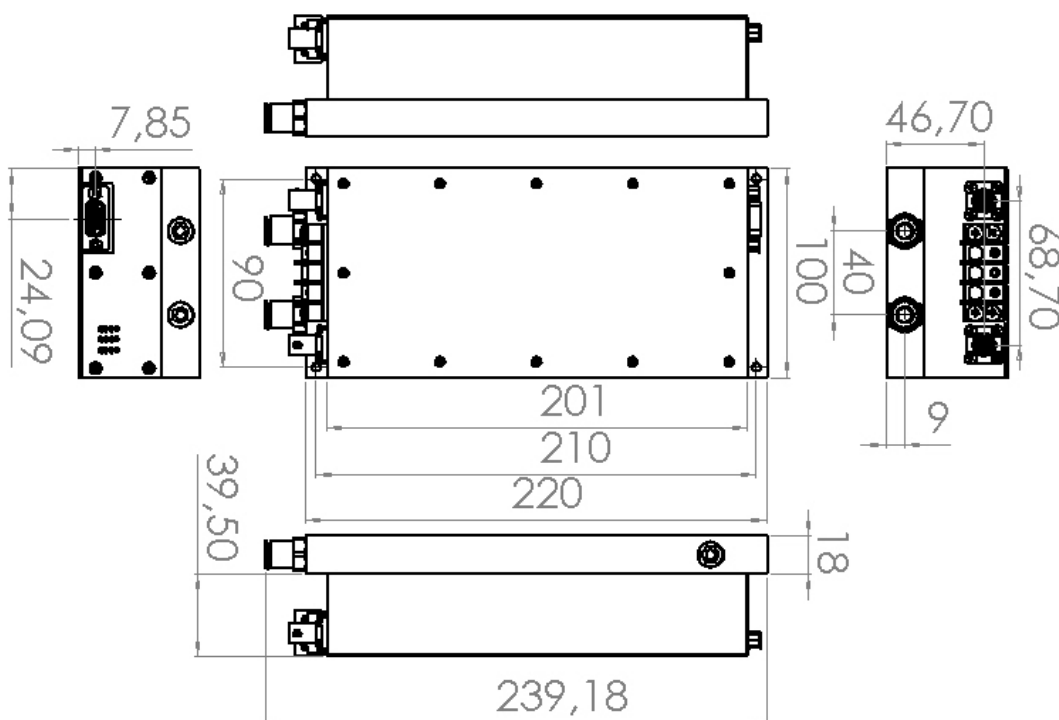
Comfortable remote control due the implemented serial interface.

Specification:

Electrical	Min	Max	Unit
Output power setting range (into 50Ω)	40(2x18)@50Ω	200 (2x80)@50Ω	W
Power supply	23.5	24.5	V
Input current	8	16 @200W	A
Power loss	80	200	W
Maximum permissible VSWR		1.25	
Pulse rate ext. FPK	DC	500	KHz
Modulation, analogue	DC	2@50Ω	MHz
Operating frequency * factory setting	24	46	MHz
Dynamic			
Fall time	80 @40.68 MHz	120 @27MHz	ns
Rise time		100	ns
Harmonics suppression	>40		dB
Dynamic response	>40		dB
Thermal			
Temperature drift	-	0,2	W/K
Time to reach thermal stability		120	s
Ambiance / Installation / Transport			
Water flow rate @ 22°C	60	na	l/h
Storage temperature	-5	+80	°C
Transport (temporary)	-20	+100	°C
Relative humidity in storage		90	%
Ambient temperature during operation	+5	+45	°C
Relative humidity during operation		75	%
Ambient conditions, room air	Atmospheric, room air 3000m above sea level		
Body Dimensions L x W x H	-	201 x 100 x 40	mm
Weight * heat sink dependent	1100	2400	g

Specifications are based on measurements in a 50 Ω system.

Dimension: (mm)



Subject change without notice V11_R12