



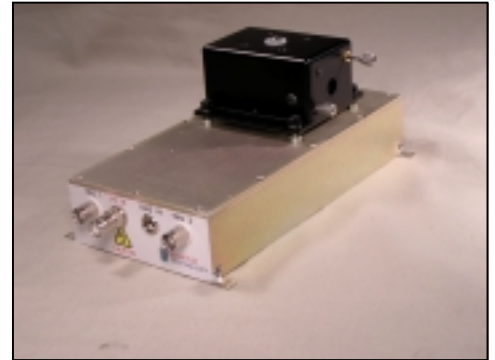
# QUANTUM TECHNOLOGY, INC.

108 Commerce St., Suite 101, Lake Mary, Florida, 32746-6212, USA  
FAX 407-333-9352 PHONE 407-333-9348 TOLL FREE 800-232-4291  
EMAIL: staff@QuantumTech.com WEB: www.QuantumTech.com

MODEL  
**STARFIRE Q-SW SYSTEM**  
**HV PULSER**  
DATA SHEET 782

## STARFIRE HV PULSER

- ✓ 1-9 KV OUTPUT
- ✓ 4 NSEC RISETIMES
- ✓ PULSE-PICKING AND REGEN
- ✓ Q-SWITCH APPLICATIONS
- ✓ 10 KHz AND 20 KHz REP RATES
- ✓ INTEGRATED GIMBAL MOUNT
- ✓ FLEXIBLE MOUNTING



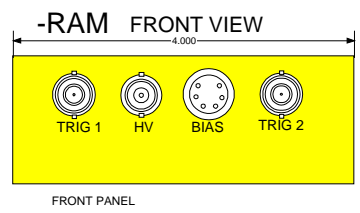
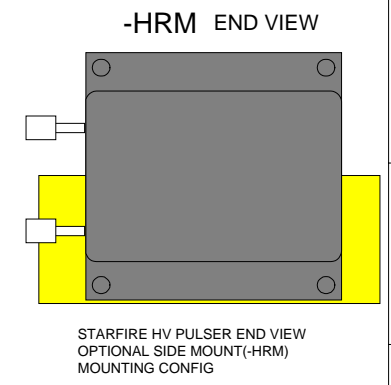
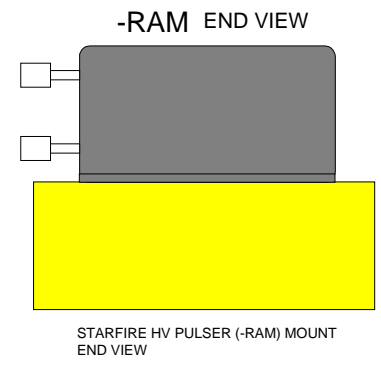
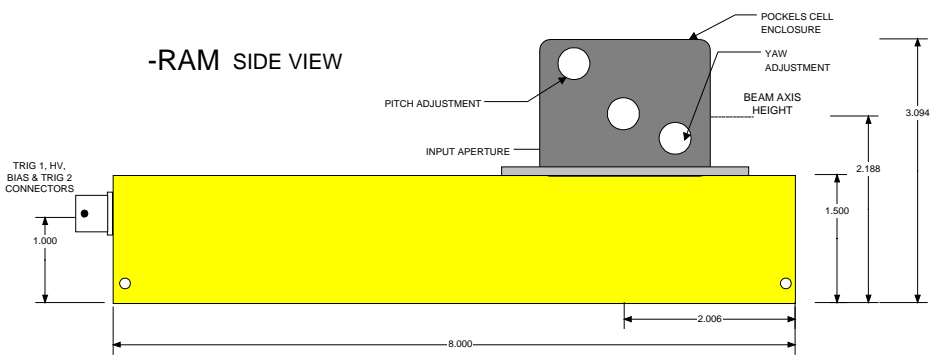
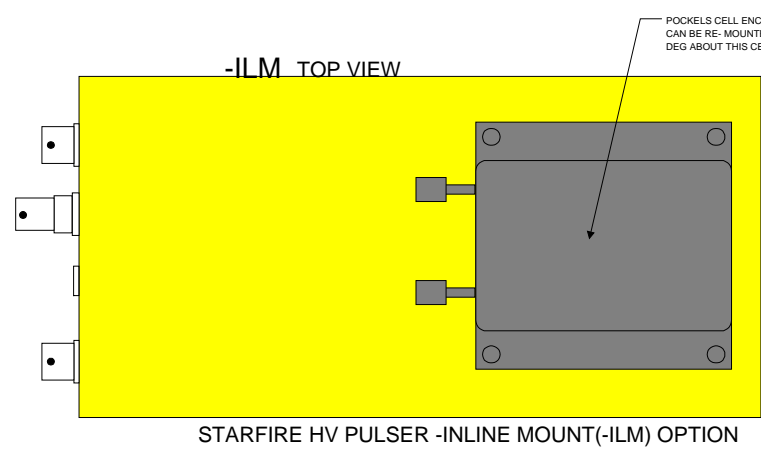
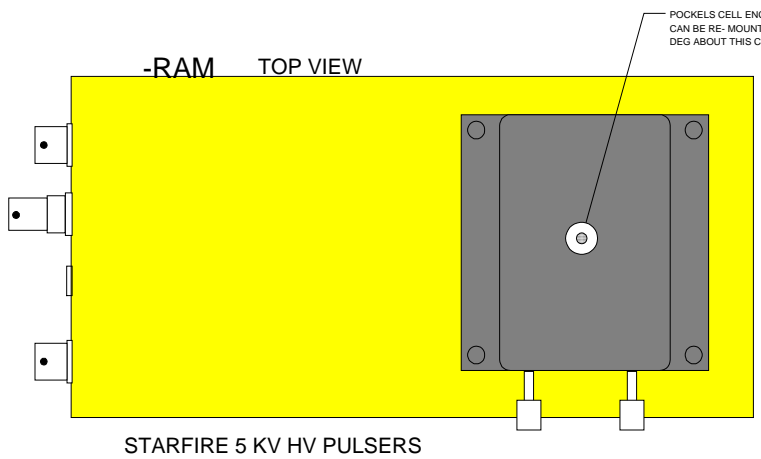
The Model STARfire Q-Switch system solves most Q-switching system requirements. Consisting of a High speed proprietary switching technology mated with almost any type of Dry or Wet Pockels Cells from the QS (BBO) series, QC (KD\*P) cell or RT (RTP) series, this combination lives up to the most demanding expectations. Rise times of 2-3 nsec are typical although higher crystal capacitances and operating voltages will increase the rise and fall times. The unit may be powered by an external 24V supply to power the internal HV electronics or by a PS-24-6006 5 KV power supply.

### STARfire Specifications

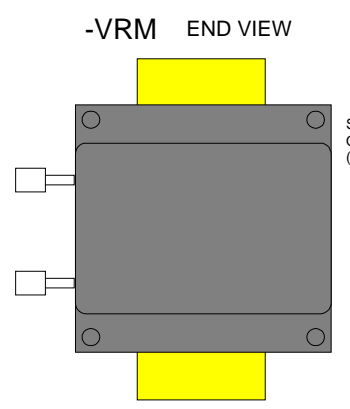
<b>Output Voltage</b>	1-5KV option to 9 KV(-9DR, -5-2 -xx option)
<b>Rise Time</b>	3ns with QS-3 and RT-3, 5 ns with QC-10 typ
<b>Fall Time</b>	3ns with QS-3 and RT-3, 5 ns with QC-10 typ
<b>Rep Rate</b>	1-10KHz
<b>Pulse Width</b>	<10ns-1us * <120ns-1us
<b>Jitter</b>	<0.5ns
<b>Ringing</b>	<5% typ
<b>Trigger Connector</b>	BNC
<b>HV Input/Output Connectors</b>	SHV/SHV (without PC mount)
<b>Input Power Connector</b>	Mini DIN Connector
<b>Pockels cell mount</b>	Precision Pitch & Yaw Gimbal with fixed Risers
<b>Status LEDs</b>	Max Rep Rate and Thermal Shut down

Starfire 5 -24V (or 5-2-24V) internal supply and 24V power required. Starfire 5-X24V (or 5-2-X24V) external HV and typically powered by PS-24-6005 or HVPS-6005 power supply required. \*Only Starfire-5-2 and -5-1 limited to 120nec min pulse width. Starfire-9-DR rise times are slightly slower. Timing/Divider/Delay units available.

REV.	DESCRIPTION	DATE	BY



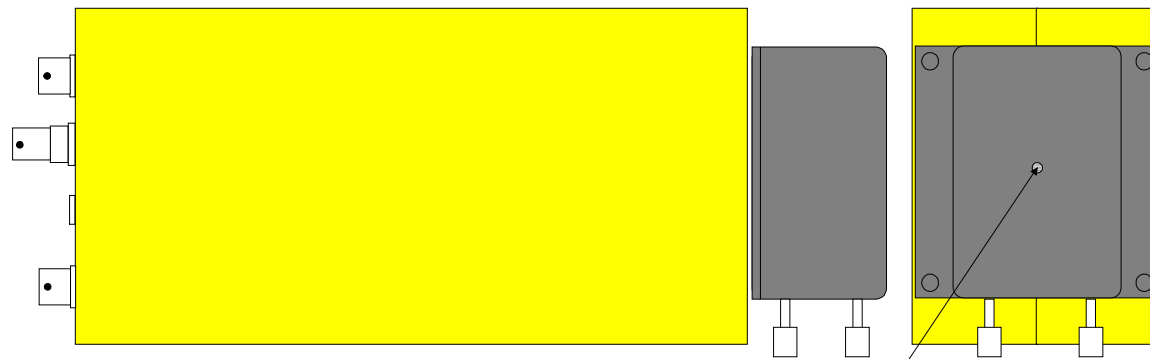
4" X 8" BASE PLATE



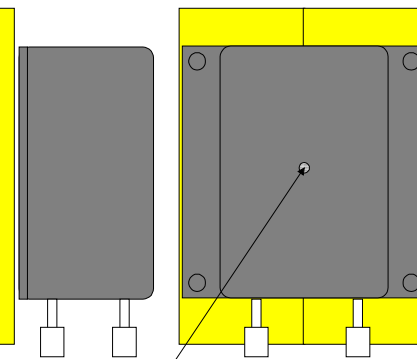
MAT: 6061-T6 AL FINISH: 16, GOLD IRRIDITE DEBUR .02 TYP. TOL: .XXX +/- .005 .XX +/- .01		QUANTUM TECHNOLOGY INC. 108 COMMERCE ST. LAKE MARY, FL 32746	
STARFIRE 5 HV PULSER			
SIZE A	FSCM NO 58158	DWG NO STARFIRE HV PULSER	REV
SCALE 1 : 1	DRN BY Date:	CHK BY Date:	SHEET 1 OF 4

REV.	DESCRIPTION	DATE	BY

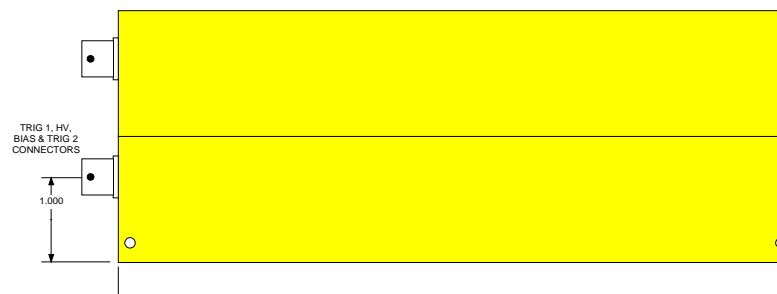
-HRM TOP VIEW



-HRM END VIEW

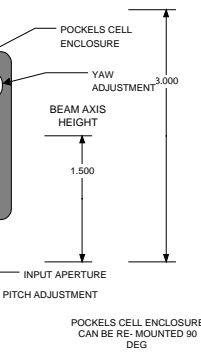


STARFIRE-9DR HV PULSER  
STARFIRE-5-2 HV PULSER  
-HRM SIDE VIEW



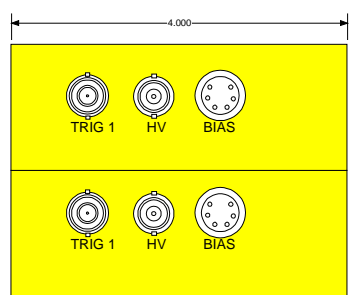
POCKELS CELL ENCLOSURE  
CAN BE RE-MOUNTED 90  
DEG ABOUT THIS CENTER

STARFIRE-9DR HV PULSER  
STARFIRE-5-2 HV PULSER

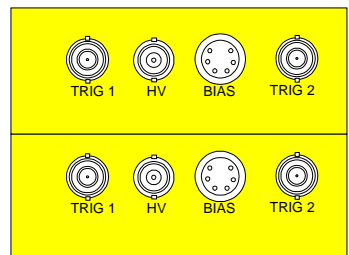


POCKELS CELL ENCLOSURE  
CAN BE RE-MOUNTED 90  
DEG

-HRM FRONT VIEW



STARFIRE-9DR HV PULSER

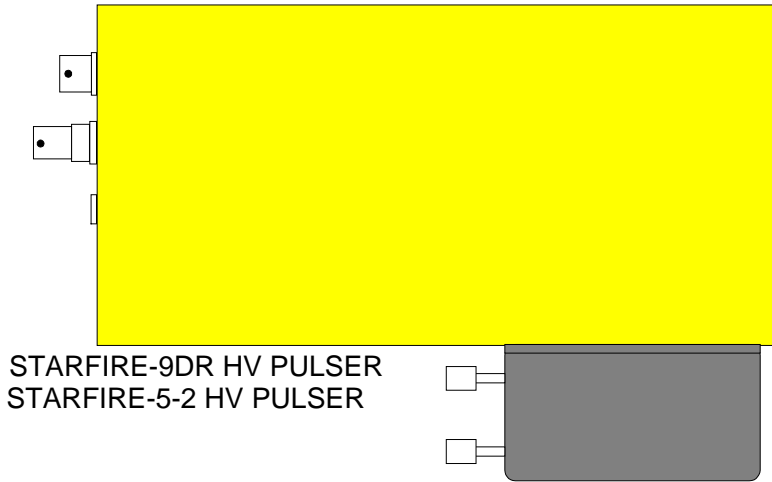


STARFIRE 5-2 PULSER

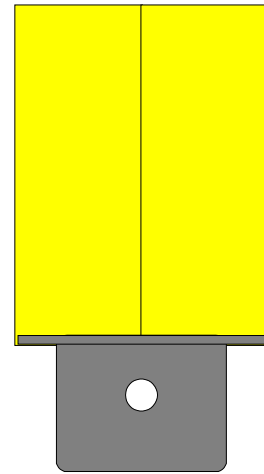
MAT: 6061-T6 AL FINISH: 16, GOLD IRRIDITE DEBUR .02 TYP. TOL: .XXX +/- .005 .XX +/- .01		QUANTUM TECHNOLOGY INC. 108 COMMERCE ST, LAKE MARY, FL 32746	
STARFIRE-5-2 HV PULSER, 9KV DIFFERENTIAL		SIZE A	REV
SCALE 1:1	DWG NO 58158	STARFIRE-5-2 HV PULSER	SHEET 2 OF 4

REV.	DESCRIPTION	DATE	BY

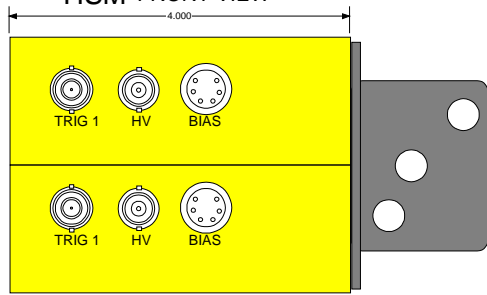
-HSM TOP VIEW



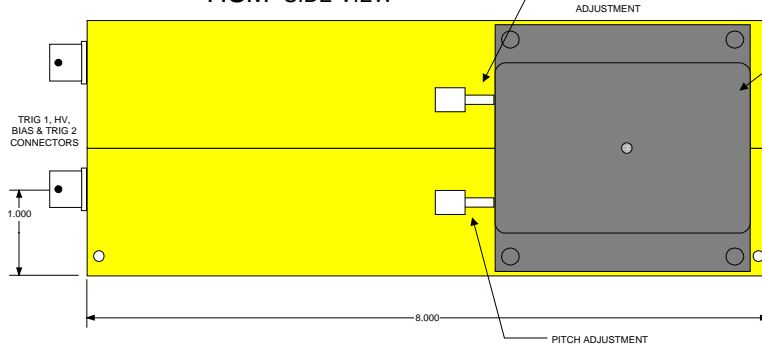
-HSM END VIEW



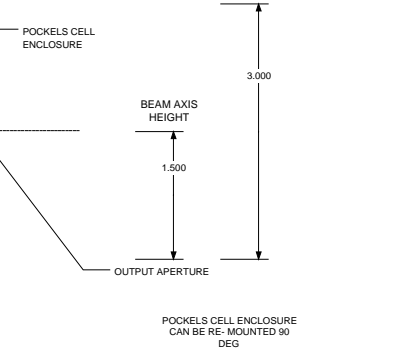
-HSM FRONT VIEW



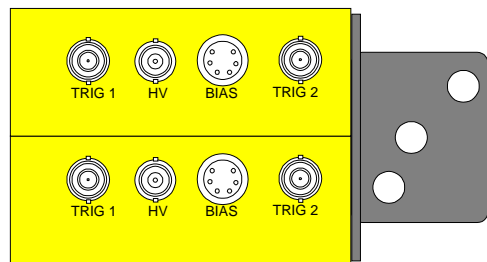
-HSM SIDE VIEW



STARFIRE-9DR HV PULSER  
STARFIRE-5-2 HV PULSER



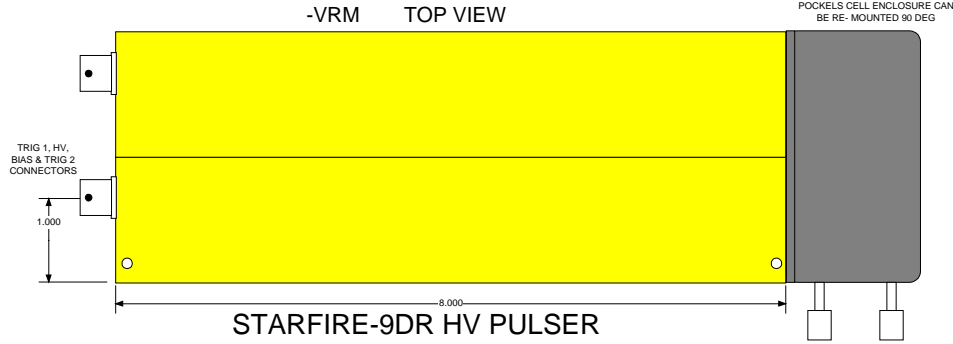
-HSM FRONT VIEW



MAT: 6061-T6 AL FINISH: 16, GOLD IRRIDITE DEBUR .02 TYP. TOL: .XXX +/- .005 .XX +/- .01		QUANTUM TECHNOLOGY INC. 108 COMMERCE ST, LAKE MARY, FL 32746	
STARFIRE-5-2 HV PULSER, -9DR 9KV DIFFERENTIAL			
SIZE	FSCM NO	DWG NO	REV
A	58158	STARFIRE-5-2 HV PULSER	
SCALE	1:1	CHK'D BY	SHEET 3 OF 4

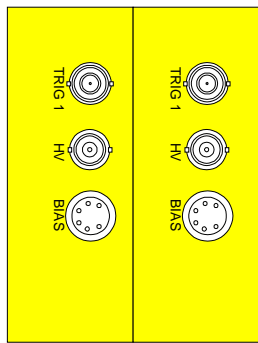
REV.	DESCRIPTION	DATE	BY

-VRM TOP VIEW

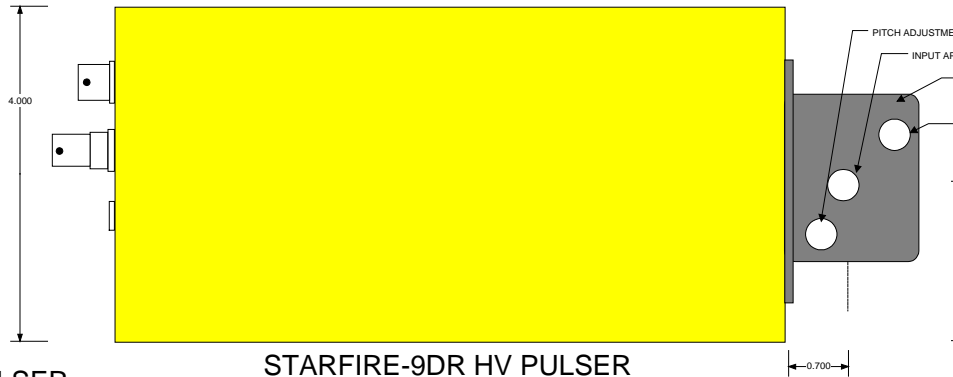


STARFIRE-9DR HV PULSER  
STARFIRE-5-2 HV PULSER  
-VRM SIDE VIEW

-VRM FRONT VIEW



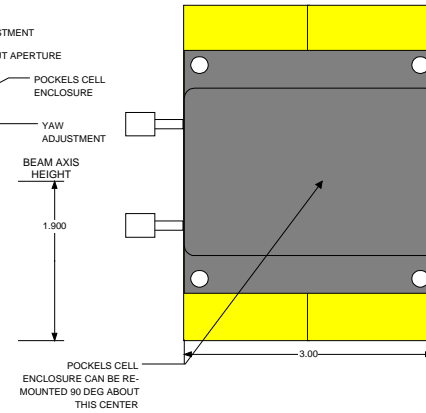
STARFIRE-9DR HV PULSER



STARFIRE-9DR HV PULSER  
STARFIRE-5-2 HV PULSER

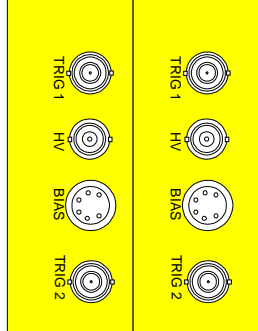
POCKELS CELL MOUNT OPTIONS:  
-HRM, -VRM

-VRM END VIEW



STARFIRE-9DR HV PULSER  
STARFIRE-5-2 HV PULSER

-VRM FRONT VIEW



STARFIRE 5-2 PULSER

MAT: 6061-T6 AL FINISH: 16, GOLD IRRIDITE DEBUR .02 TYP. TOL: .XXX +/- .005 .XX +/- .01		QUANTUM TECHNOLOGY INC. 108 COMMERCE ST., LAKE MARY, FL 32746	
STARFIRE-9DR HV PULSER, 9KV DIFFERENTIAL, 10-1000ns typ		STARFIRE-5-2 HV PULSER, 9KV DIFFERENTIAL, 120ns-1ms typ	
SIZE A	FSCM NO 58158	DWG NO STARFIRE-9DR HV PULSER	REV
SCALE 1:1	DRN by Date	CHK by Date	SHEET 4 OF 4