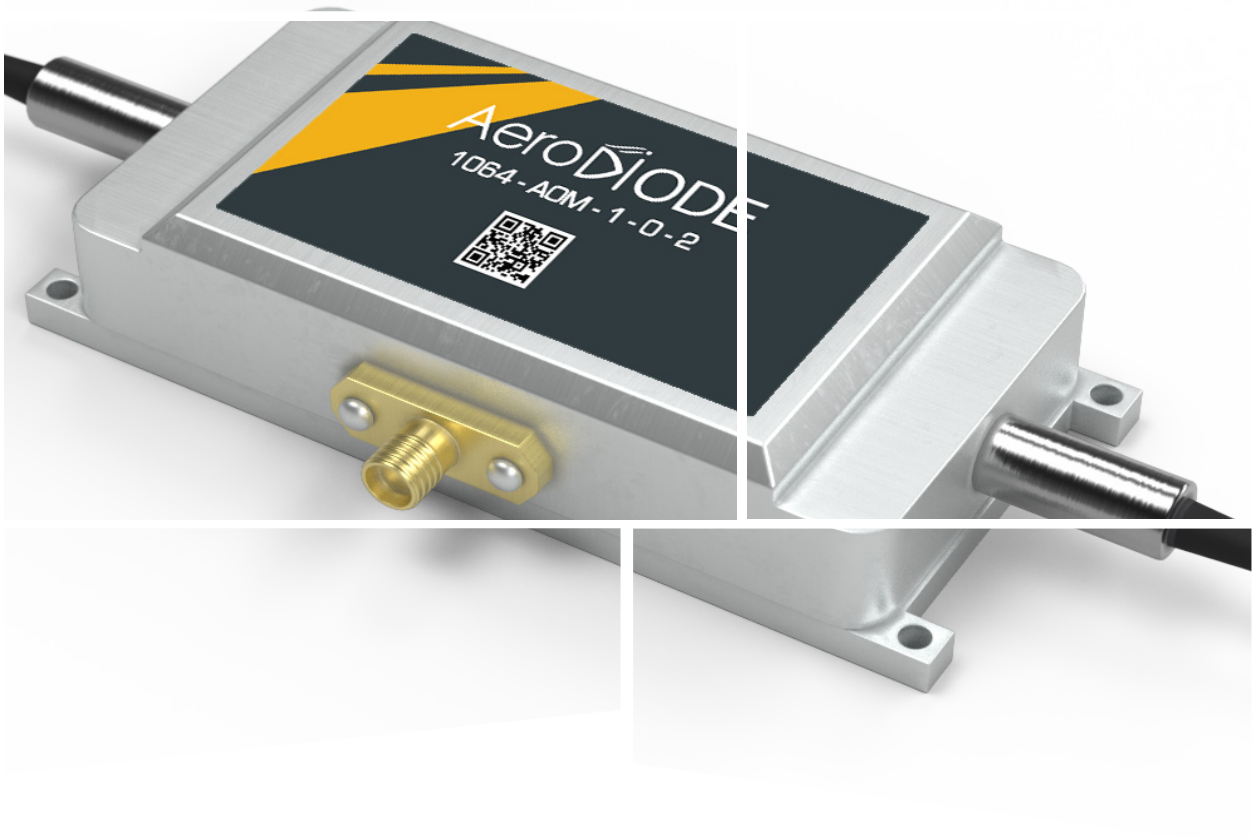
AOM

Fiber-coupled Acousto-Optic Modulator



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AOM

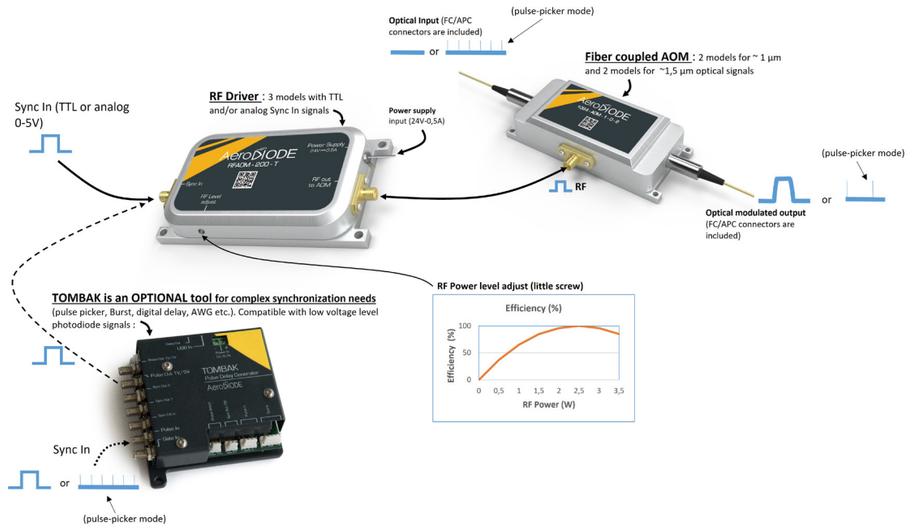
Precision fiber-coupled Acousto-Optic Modulator

with RF-drivers and optional synchronization tools.

Designed to offer an optimized solution for amplitude modulation of fiber laser light between 750 nm and 1720 nm. It is an easy-to-implement solution allowing direct control of the timing, intensity, and temporal shape of the laser output. This fiber-coupled light modulation solution requires an RF driver which is offered in either digital Input (TTL) or analog-input configuration.

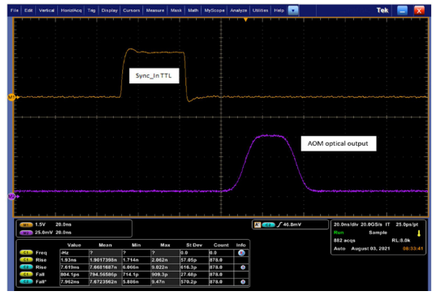
Key features:

- These devices are ideal tools for modulating the intensity of light down to the nanosecond timing range
- It is compatible with most of Q-switching or Pulse-picking applications needs.
- Down to 10 ns rise/fall time
- Low insertion loss down to 1.2 dB
- 12 AOM versions over 6 wavelengths ranges : 750-810 nm, 900-985 nm, 1000/1090 nm, 1240-1380 nm, 1470-1630 nm and 1580-1720 nm.
- 3 RF driver versions with digital and/or analog inputs
- These products can also be used as a fixed frequency shifter. It slightly shifts the central optical wavelength by a fixed value equal to the RF frequency (80, 100 or 200 MHz).



Technical Specifications

RF Driver - std version (TTL or analog).



20 ns output optical pulse shape (high speed AOM version).

RF driver : Special version able to combine digital (TTL) and analog inputs.

AOM Modules performances:

Nominal Wavelength	780 nm		940 nm		1064 nm		1310 nm		1550 nm		1650 nm	
Version type	standard	high speed	standard	high speed	standard	high speed	standard	high speed	standard	high speed	standard	high speed
Wavelength range	750 - 810 nm		900 - 980 nm		1000 - 1090 nm		1240 - 1380 nm *		1470 - 1630 nm *		1580 - 1720 nm *	
Max average power	5 W		5 W		5 W		0.5 W		0.5 W		0.5 W	
Insertion loss (typ)	1.2 dB	2.5 dB	1.2 dB	2.5 dB	1.2 dB	2.5 dB	2.5 dB*	4.5 dB*	2.5 dB*	4.5 dB*	2.5 dB*	4.5 dB*
Rise time (10-90%) - max values	50 ns	10 ns	50 ns	10 ns	50 ns	10 ns	50 ns	10 ns	50 ns	10 ns	50 ns	10 ns
RF Frequency	100 MHz	200 MHz	100 MHz	200 MHz	100 MHz	200 MHz	80 MHz	200 MHz	80 MHz	200 MHz	80 MHz	200 MHz
Fiber : type / coating / pigtail	PM780 / 900 µm / FC-APC		PM980 / 900 µm / FC-APC		PM980 / 900 µm / FC-APC		PM1550 / 900 µm / FC-APC		PM1550 / 900 µm / FC-APC		PM1550 / 900 µm / FC-APC	

* : Insertion loss over the nominal wavelength ± 50nm. Add 0.5dB for complete wavelength range.

Classification:

Name	1064AOM- or RFAOM-
AOM version :	1 : Standard 2 : High speed
RF Driver Version :	T : Standard digital (TTL input) A : Standard analog (0-5V analog input) TA : High-end model (TTL and analog inputs)
TOMBAK (option)	Tombak (unique model)

TOMBAK is an **optional** pulse delay generator (with a photodiode compatible input). It is ideal for complex synchronization needs like pulse-picking a mode-locked laser.

Ordering information:

AOM: 1064AOM - [_]

Nominal Wavelength : 780, 940, 1064, 1310, 1550, 1650

Version : 1 : standard, 2 : high speed

RF Driver : RFAOM - [_] - [_]

Version : T, A, TA

RF Frequency (MHz) : 80, 100, 200 (refer to RF frequency of the AOM see the table above)

Optional TOMBAK pulse delay generator synchronization tool :

TOMBAK (unique model version)

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