

SHUTTTER TYPES

OVERVIEW 06.2018, rev. 06.2019

	Copal	Sinar/Leica/Rodenstock eShutter	Focal Plane Shutter	Electronic Shutter
01 Type	Leaf shutter, mechanical	Leaf shutter, electro-magnetical	FPS, electro-magnetical	Electronic (rolling) shutter
02 Main Application with ALPA	ALPA lenses	ALPA lenses	ALPA 12 FPS	Phase One IQ3 100/Trichromatic, Phase One IQ4 series Hasselblad H6D 100c, Hasselblad X1D
03 Sizes	Copal 0 Copal 1 (few lens types)	Copal 0 for both eShutter type 125 and 250	6x4.5 (42 x 54 mm)	40.4 x 53.9 mm 33 x 44 mm
04 Fastest Shutter Speed	Copal 0: 1/500 sec Copal 1: 1/400 sec	e250: 1/250 sec e125: 1/125 sec	1/4000 sec	1/4000 sec for Phase One, Hasselblad X1D (1/8 sec for H6D 100c)
05 Longest Shutter Speed	1 sec, B, T	Silex Mk II: 128s, T or depending on 3d party control unit/app, T	128 sec, T	depending on back/camera, T
06 Fastest Flash Sync Speed	1/500 sec	e250: 1/250 sec e125: 1/125 sec	1/125 sec	not available
07 Control	mechanical, built in	external control unit (ALPA or Sinar) or tethered (adapter box)	FPS, fully integrated	fully integrated into the digital back, triggering possible (Phase One)
08 Diaphragm	built in	built in	depending on the lens	depending on the lens
09 Synchronization for digital backs	Flash cabling (sync post to mini jack or multipin), ALPA Sync Release solution	Flash cabling, connect to control unit	Flash cabling, connect to ALPA 12 FPS	not available
10 Lighting	Flash and permanent light	Flash and permanent light	Flash and permanent light	Permanent light only, use of flash not possible or only with heavy restrictions
11 Visible Rolling Shutter Effect	none	none	depending on the orientation and subject possible	depending on the orientation and subject possible