

Spark SX5 compared to Petzl NAO

Feature	SX5-CW	SX5-NW	NAO	Comments
Price		\$75.00	\$175.00	NAO Includes 1 non replaceable 2300mah Li-Ion Battery. Add \$58.00 for spare. Add \$12.00 for GP 2600 mAh 18650 for SX5.
Battery		3XAAA, 3XAA, 1X26650, 1X18650, 2-CR123A	1X18650 or 2XAAA	SX5: Optional belt mount battery pack allows for 4X18650 or 8XCR123A. NAO: Can use 2XAAA cells with reduced features and performance.
Use standard rechargeable cells		Yes: All	No: Li Ion, Yes for AAA cells	NAO: Cannot swap standard 18560 cells into light, extra cells require buying proprietary Petzl 2300mAh Li-Ion battery for \$58.00
Battery life on highest setting with Li Ion 18650 cell		3 hrs	1.3 hrs	Battery life on SX5 can be extended to 11.5 hrs at High mode with optional belt pack.
Optional Belt Kit		Yes	Yes	Belt case for SX5 extends capacity to 4 18650 cells which will give 11.5 hours at max setting. NAO belt case does not extend capacity, just relocates battery.
Can charge external USB devices (iPhone, Android, iPad) from battery pack.		Yes	No	SX5: Either the head mount or belt mount pack can charge USB devices with optional \$6.00 USB cable.

Highest setting for constant output	350 lumens	320 lumens	315 lumens	According to a reviewer, the 315 lumens for the NAO is the sum of the two separate emitters. So for example you are only getting a maximum of 157.5 lumens from each emitter at any given time.
Emitter	XML-T6	XML-T5	XP-G	XM-L emitter 20% more power efficient and throws more light than XP-G predecessor.
Case Construction	7075 Anodized Alu		Plastic	Plastic case does not provide RFI shielding.
Weight	140gm		190gm	Both with headband and 1 18650 battery
Shields RF/EM Interference	Yes		No	Shielded SX5 headlamps will not interfere with radio communications equipment, phones, GPS, etc. Testing has shown that the Petzl does interfere with avalanche transceivers, and distorts images taken with digital cameras.
'Reactive Lighting'	No		Yes	Reactive lighting will cause beam to dim unexpectedly in snow, rain, fog or when mud or water splatters onto the sensor.
Beam Distance on Highest	80m		93m	Actual field testing may change figures.
Beam Pattern	Combination throw/flood 80 degrees spill		1 spot, 1 flood.	Cannot find any published spill data for Petzl.
Articulation Method for positioning beam angle	Elastomer Friction Fit		Plastic Hinges	Unbalanced hinge designs are fragile, prone to breakage, and prone to losing position during repetitive activities such as biking, hiking and jogging.

Reverse Polarity Insertion and protection	Yes	No	SX5: Can change batteries in the dark any polarity. NAO: Cannot change Li Ion battery, but you can remove it by disconnecting it, and then inserting AAA cells, observing polarity. Cannot remove battery with gloves on, and difficult with fingers.
Switch between Spot and Flood	No	Yes	Spark SD series allows switch spot/flood
Waterproof	IPX8, submersible to 2m before switch can get activated due to water pressure.	IPX4, splash resistant, not submersible.	
User selectable lighting modes	Yes, electronic pressure switch	Yes	NAO: Computer needed to select or modify lighting profiles.