

	Type	Resolution	Noise (RMS)	max speed	Price	link	Interfaces			Electrical connection		Notes											
Note: only encoders with bandwidth (filter cutoff) >200Hz are considered		Count/rev	deg	RPM	Each, for 10 units		Quadrature	index	absolute	Single ended	Differential	ODrive does not have a receiver for differential encoders, you will have to add that yourself.											
	Generic 600ppr encoder	shaft	2400	0.0433	4500	\$12.00	https://www.aliexpress.com/item/1005002511111111.html	y	n	n	y		n										
	CUI - AMT10	through bore	8192	0.0127	7500	\$24.00	https://www.aliexpress.com/item/1005002511111111.html	y	y	n	y		y	Standard ODrive Robotics encoder									
	CUI - AMT11	through bore	16384	0.0063	4000	\$32.00	https://www.aliexpress.com/item/1005002511111111.html	y	y	n	y		y										
	USDigital - E6	through bore	40000	0.0026	4320	\$67.00	https://www.aliexpress.com/item/1005002511111111.html	y	y	n	y		y										
CUI - AMT23	through bore	16384	0.0063	4000	\$49.00	https://www.aliexpress.com/item/1005002511111111.html	n	y	y	y	n	We have discovered an issue with these and are investigating. See: https://github.com/madcowswe/ODrive/issues/420#issuecomment-665274932											
CUI - AMT21	through bore	16384	0.0063	4000	\$49.00	https://www.aliexpress.com/item/1005002511111111.html	n	y	y	n	y								RS-485 protocol not yet implemented				
AMS - AS5047P	on-axis chip	16384	0.0680	28000	\$7.62	https://www.aliexpress.com/item/1005002511111111.html	n	y	y	y	n	Supported in SPI AMS mode											
AMS - AS5048A	on-axis chip	16384	0.0600		\$7.38	https://www.aliexpress.com/item/1005002511111111.html	n	y	y	y	n							Supported in SPI AMS mode					
AMS - AS5047U	on-axis chip	16384	0.0480	28000			y	y	y	y	n	Not currently supported by ODrive											
MagAlpha - MA702	on-axis chip	4096	0.0300	60000	\$5.10	https://www.aliexpress.com/item/1005002511111111.html	n	y	y	y	n												
Infineon - TLE5012	on-axis chip	16384	0.0500																				
AMS - AS5311 (w 128p mag ring)	multipole off-axis	262144	0.0017	1099	\$15.00	https://www.aliexpress.com/item/1005002511111111.html	y	n	n	y	n	Has stocking issues											
REV Through Bore Encoder	through bore		It is actually a Broadcom AEAT-8800-		\$35.00	https://www.aliexpress.com/item/1005002511111111.html	y	y	y	y	n												