

Wild Thumper

Quadrature encoders

Due to popular demand the 4WD and 6WD Wild Thumper chassis's now have the option of quadrature encoders. These encoders can operate with both 3.3V and 5V logic systems and have reverse polarity protection built into the sensors.

6WD chassis's will have a left and right encoder on the middle wheels. 4WD chassis's will have a left and right encoder on the front wheels. Upon request we can produce chassis's with encoders on every wheel if required.

Our encoders use custom made 8-pole magnets and 2 hall-effect sensors to provide 2 square waves, 90° out of phase with a total of 16 state changes per motor revolution.

The output resolution will be 544 state changes per revolution for the 34:1 gearbox and 1200 state changes per revolution for the 75:1 gearbox.

This geared motor / encoder combination is available as a separate item.

Specifications:

Motor voltage:	6V (7.5V maximum)
Motor stall current:	5.5A @ 7.5V (typical)
Output torque:	4Kg/cm with 34:1 ratio 8.8Kg/cm with 75:1 ratio
Encoder Vcc:	3V – 24V
Encoder output A:	square wave: Gnd-Vcc
Encoder output B:	square wave: Gnd-Vcc
Encoder resolution:	16 state changes per revolution

