

SEM1

ELECTRONIC MOTOR

For your precise auto-steering system



SUPERIOR PERFORMANCE

SEM1 is an automatic driving steering control motor that integrates the electric motor and ECU into one rugged device, outputting stable and high torque. Two modes of speed control/ position control to suit your different work scenarios. With large and stable torque, low noise, low heat, high precision and overload control, SEM1 shows superior performance.

EASY TO USE

With few cable connection and clear guide, SEM1 can be easily installed on the vehicle within 15min. Easy to install and maintain makes it a reachable solution for all farmers. Adopts the integrated design of drive and control, it can be widely used on vehicle auto-steering related applications, like precision agriculture.

GREAT DURABILITY

For the internal design, the SEM1 realizes long-term operations with less heating, which protects its components and prolongs the working life. As for the outside housing, SEM1 features IP67 waterproof and dustproof level, suitable for agricultural and other outdoor harsh working environment.

MOTOR PARAMETER

Rated speed	100 rpm, maximum rotation: 125RPM
Rated torque	4.5N*M, maximum: 9N*M
Control mode	Speed Mode, Position Mode

ELECTRICAL

Rated voltage	12 VDC
Voltage range	6 ~ 35VDC
Rated current	12.5A
Input power continuous current	25A, maximum
peak current	40A
Stall current	25A
Software overload current	25A (Overload time could be set)
Hardware peak protection current	60A
Output Rated Power	100W

PHYSICAL

Hight	85mm
Diameter	182mm
Weight	4.5 kg
Material	Aluminum alloy

ENVIRONMENTAL

Operating temperature	-40 °C to + 105 °C
Storage temperature	-45 °C to + 150 °C
Environmentally	IP67 dustproof and waterproof

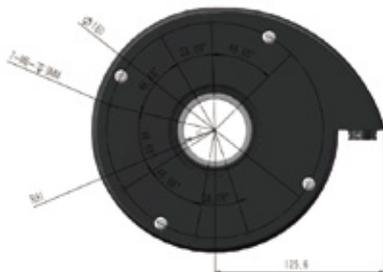
COMMUNICATIONS

Interface	RS232, CANBUS, Analog to Digital conversion
Protocol	ModBUS, CAN
Encoder resolution	53248 line, 4000 pulses per circle
Encoder interface	Parallel communication, no protocol
Feedback element	Incremental encoder 53248PPR
Encoder output frequency	200Khz maximum
Max backlash error (degrees)	No reducer, no backlash error

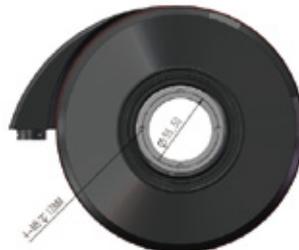
All specifications are subject to change without notice.

DRAWINGS

Bottom View



Top View



Side View

