

UniOne

GNSS AutoSteering System

Specifications

Power

Supply Voltage 7 - 18V DC
Support 24 - 36V DC
(with additional power module)
Consumption 5-15A
Rated torque power 7-16 N.m
Rated speed 80-100 rpm

Accuracy

±2.5 cm when receiving RTK correction signal
Minimum speed 0.6km/h with wheel angle sensor
Maximum speed 20km/h with wheel angle sensor
Tilt compensation in range +/-30 deg accuracy 0.2deg
Straight line and curve line working mode
High precision maintenance free front wheel sensor

Tractor Compatibility

System fits front-wheel steer tractors
System can be used in open-cabin tractors

Communication

2G/4G LTE wireless	CAN2.0B
LTE-FDD: B1/B3/B5/B8	RS232
LTE-TDD: B34/B38/B39/B40/B41	Wi-Fi
2G: B3/B8	NTRIP Network Protocol
	External radio available

Environmental & Compliance

PowerSteer - IP-55, operating Temperature -25 C to 55 C
Controller - IP-67, operating Temperature -30 C to 85 C
Tablet - IP-65, when used with supplied dock

Components

PS10 Tablet



10.1" Capacitive Touch Screen
CPU Quad-Core 1.5GHz
Operating System - Android 10.0
Resolution 1024x600 pixels
Memory 2GB RAM + 16GB ROM

Wi-Fi 2.4GHz IEEE 802.11 b/g/n
Cellular LTE-FDD: B1/B3/B5/B8
LTE-TDD: B34/B38/B39/B40/B41
2G: B3/B8
Power failure detection

PowerSteer



Steering wheel actuator 171mm x 65mm
Rated voltage 12 VDC
Rated current 3A
Rated torque power 7-16 N.m
Peak current 15A

Control mode Speed Mode, Position Mode
Rated speed 80-100 rpm
Software overload current 20A
Protocol CAN/RS232
Encoder resolution 10000 lines

Controller



Has built-in 3D terrain compensation
Adaptive correction of vehicle condition
Rated voltage 12 VDC
Rated current 1A
Integrated data transmission station

Horizontal or vertical installation
Integrated high-precision inertial navigation
Internal control frequency 2000Hz
Protocol CAN/RS232
IP-67, operating Temperature -30 C to 85 C

GNSS Antenna



GPS L1, L2, GLONASS L1, L2
BeiDou B1, B2, GALILEO E1, E5b
QZSS L1, L2, SBAS L1

WAS Wheel Angle Sensor



Front wheel angle inertial sensor
Improve control accuracy and stability
IP-67, operating Temperature -30 C to 85 C