

EtherNet/IP

Absolute Encoders WDGA

Fast and compact

- The world's fastest and most compact EtherNet/IP encoder!
- Integrated web server
- High precision: $\pm 0.0878^\circ$
- High dynamics: 50 μ s
- Programmable setting parameters



46.5 mm

EtherNet/IP



IndustrieROBUST

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Wachendorff Automation has developed and manufactured systems and encoders for over 30 years. These have been used in a variety of applications all over the world. More than 2,000 implemented customer solutions demonstrate our high level of flexibility. Our encoders and systems come with a 5-year warranty – which is unique worldwide.

We have expanded our WDGA series of absolute encoders to include the industrial Ethernet interface EtherNet/IP.

With our compact EtherNet/IP WDGA58F encoder with bus cover, we have designed the world's smallest device for axial and radial direction. This saves you precious installation space. Extremely high load capacities ensure a long service life and reliable operation. In addition to the excellent mechanical properties, we have used the latest electronic components and most up-to-date communication profiles and encoder profiles.

Thanks to new high-precision and high-dynamic technologies, these extremely robust absolute encoders with magnetic scanning can be used in areas where absolute encoders with optical principle could not be used until now.

Technical Data:

Types: clamping flange / hollow shaft (blind-bored)

Power supply/Current consumption:

10 VDC up to 32 VDC; typ. 125 mA

Power consumption: typ. 3 W

Operating temperature: -40 °C up to +85 °C,
-40 °F up to +176°F

Sensor data:

Single-turn: patented QuattroMag® technology

Single-turn resolution: up to 65,536 steps/360° (16 bit)

Single-turn accuracy: $\pm 0.0878^\circ$ (≤ 12 bit)

Internal cycle time: 50 μ s

Multi-turn: patented EnDra® technology no battery and no gear.

Multi-turn resolution: up to 43 bit

Integrated web server:

Configurable: IP address, Subnet mask, Gateway address

Readable: Encoder parameters

Update: Firmware

Interface: Industrial Ethernet

Protocol: EtherNet/IP™

Conformance tested according to Version CT-18,

Specification Vol 2, Ed 1.29, CIP Specification Vol 1, Ed 3.31

Classes: Position Sensor, DLR

Data Transfer: 100BASE-TX

Cycle time: 1 ms

Function: Multiturn

Code: binary, CW default, programmable

Adjustable parameters:

Number of steps per revolution, Number of revolution, Scalin, Direction of rotation, CAMs, Gear Ratio, Preset, Resolution, Unit, Speed, IP address, Position, Position Limit, Warning messages („Frequency Exceeded“ and „Position Limits Exceeded“)

Objects (CIP Objects):

Identity Object, Message Router, Assembly Object, Connection Manager, Position Sensor Object, Qos Object, TCP/IP Interface Object, EtherNet Link Object

EtherNet/IP Features:

DLR (Device Level Ring) possible,
Qos (Quality of Service) possible,
ACD (Address Conflict Detection),
Multicast- and Unicast- capability

Diagnostics: (LED)

Traffic and connection management:

L/A1: Port 1

L/A2: Port 2

Status LED:

STAT, MOD: status of encoder and bus

Any Questions? Just call us at +49 (0) 6722/9965-414, send us an E-Mail to support-wdga@wachendorff.de or call your local distributor: www.wachendorff-automation.com/distri



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Your distributor: