

## Digital Ethernet Output - Single and Dual Axis for a wide variety of applications.

The Jewell eDXI-100/200 Series is a single or dual digital inclinometer with the convenience of Ethernet output. With its power over ethernet capability, no power source is needed. Simply plug it in to your computer.



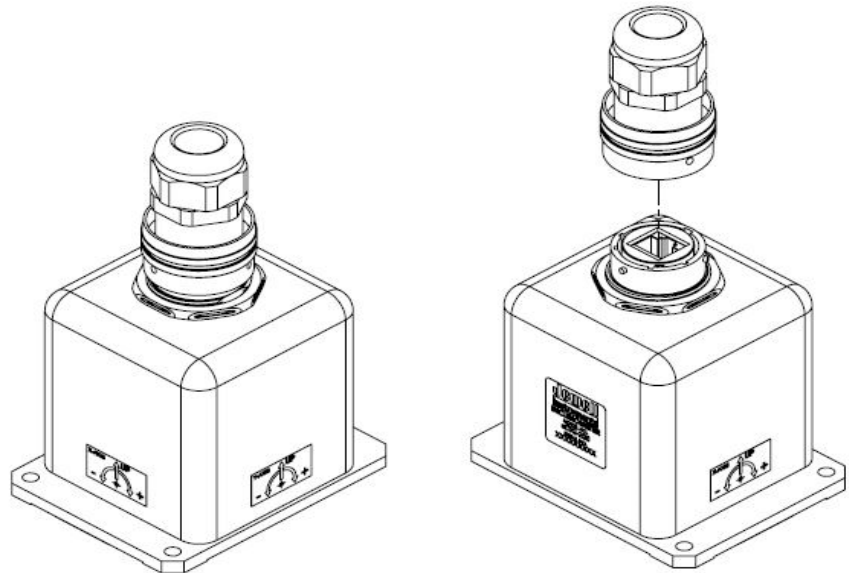
Outline Diagram: eDXI-100/200 Series Digital Inclinometer

## Features & Benefits

- Digital output
- Resolution 0.001°
- Mechanical Shock 1500g 1msec 1/2 sine
- Industry Standard Ethernet 10BaseT or 100 Base TX (Auto-sensing)
- For use in high shock and vibration environments
- PoE (power over Ethernet)
- Low Noise

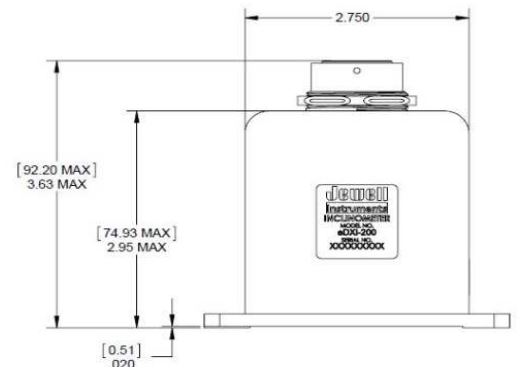
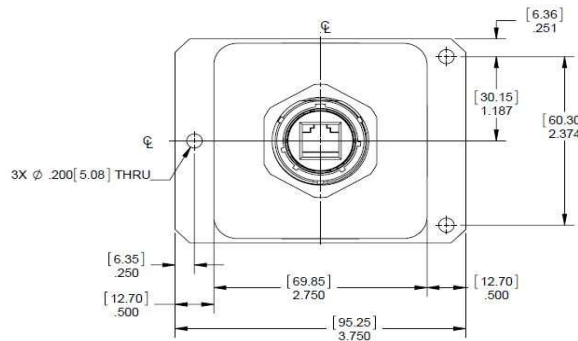
## Applications

- Radar/Antenna Control
- Structural Monitoring
- Linear Acceleration/Deceleration Measuring
- Automatic Train Control (ATC, ATP)



## Pin Out

Pin	Function
1	TX+
2	TX-
3	RX+
4	PoE45+
5	PoE45-
6	RX-
7	PoE78+
8	PoE78-



# eDXI-100/200 Series Inclinometer



*Making Sense out of Motion...*

## Performance<sup>4</sup>

Input Range <sup>1</sup> , °	±1.0	±3.0	±14.5	±30.0	±60.0
Number of Axes	1,2	1,2	1,2	1,2	1,2
Non Linearity <sup>2</sup> , %FRO, Max	0.02	0.015	0.02	0.02	0.03
Scale Factor Tolerance, % Max	0.05	0.05	0.05	0.05	0.05
Scale Factor Temperature Sensitivity, % reading/°C, Max	0.01	0.01	0.01	0.01	0.01
Output at 0° Tilt, °Max	0.01	0.01	0.05	0.05	0.05
0° Output Temperature Sensitivity, °/°C, Max	0.001	0.001	0.005	0.005	0.005
Bandwidth (-3dB), Hz, Nom <sup>3</sup>	3	6	30	30	30
Transverse Axis Misalignment, °, Max	0.15	0.15	0.5	0.5	0.5
Hysteresis, °, Max	0.001	0.001	0.001	0.001	0.001
Resolution and Threshold, °, Max	0.001	0.001	0.001	0.001	0.001
Power On Repeatability, °Max	0.001	0.001	0.001	0.001	0.001
Repeatability, °Max	0.001	0.001	0.002	0.002	0.003

## Digital Output<sup>4</sup>

Interface	Ethernet 10Base-T or 100Base-TX (Auto-sensing)
Protocol	TCP/IP, UDP/IP, ARP, Telnet, ICMP, SNMP, DHCP, BOOTP, TFTP, AutoIP, and HTTP
Output Representation	Degrees

## Electrical<sup>4</sup>

Supply Voltage, Volts DC	36 to 57
Start-up Voltage, Vdc Min	42
Input Current, mA, Max	250
Input to Output Isolation, Vpeak Impluse	1500
Noise, milli-degrees rms max	2

## Environmental<sup>4</sup>

Operational Temp Range, °C	-40 to +85
Storage and Temp Range, °C	-40 to +90
Protection Class per IEC 529	IP67
NEMA Enclosure Rating	6
Seal	MILD-STD-202 Method 112
Shock Survival	1500g, 1msec, ½ sine
Vibration Survival, grms (20Hz to 2 KHz)	20

## Enclosure<sup>4</sup>

Housing Material	Anodized and Alodine Aluminum
Weight	eDXI-200: 400g
Connector Type	Amphenol RJF72B00
Recommended Mating Connector	Amphenol RJF6B

- NOTES:
- 1 - Full range is defined as "from negative full input angle to positive full input angle"
  - 2 - Non-linearity is specified as deviation of output referenced to a best fit straight line, independent of misalignment.
  - 3 - In default condition without averaging enabled.
  - 4 - Specifications are subject to change

## How to Order

<b>Model Numbers</b>	<b>Part Number</b>	<b>Description</b>
eDXI-100-1	02550380-101	Single axis, $\pm 1^\circ$ range, fluid damped, Ethernet interface, RJ45 connector
eDXI-100-3	02550380-102	Single axis, $\pm 3^\circ$ range, fluid damped, Ethernet interface, RJ45 connector
eDXI-100-14.5	02550380-103	Single axis, $\pm 14.5^\circ$ range, fluid damped, Ethernet interface, RJ45 connector
eDXI-100-30	02550380-104	Single axis, $\pm 30^\circ$ range, fluid damped, Ethernet interface, RJ45 connector
eDXI-100-60	02550380-105	Single axis, $\pm 60^\circ$ range, fluid damped, Ethernet interface, RJ45 connector
eDXI-200-1/1	02550380-201	Dual axis, $\pm 1^\circ$ range, fluid damped, Ethernet interface, RJ45 connector
eDXI-200-3/3	02550380-202	Dual axis, $\pm 3^\circ$ range, fluid damped, Ethernet interface, RJ45 connector
eDXI-200-14.5/14.5	02550380-203	Dual axis, $\pm 14.5^\circ$ range, fluid damped, Ethernet interface, RJ45 connector
eDXI-200-30/30	02550380-204	Dual axis, $\pm 30^\circ$ range, fluid damped, Ethernet interface, RJ45 connector
eDXI-200-60/60	02550380-205	Dual axis, $\pm 60^\circ$ range, fluid damped, Ethernet interface, RJ45 connector