



**COMPUTER
CONVERSIONS
CORPORATION**

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**MULTIPLEXED ENCODERS
MXDS SERIES**

DESCRIPTION

The MXDS Series are multiplexed single turn absolute encoders whose electrical and mechanical specifications are basically the same as the DS series found on pages 17 and 18 of this catalog. The only difference is that this series has the capability to multiplex up to 16 input shaft positions into one set of electronics, with up to 13 bits of binary or 4 digits of BCD output. Custom scaled 4 digit displays up to 9999 and heavy duty NEMA 12 transducers are also available. These multiplexed encoders will provide the lowest cost and most reliable absolute multi-axis system available today, even when compared to individual noise prone, and undependable incremental systems.

TYPICAL UNITS

T-6031-51

Pt. No. (1), (2), (3), (4)	Output Code	Counts 360°	Revolutions for full Count	Data Range	Address	Electronics Size
MXDS90-DB-X-Y	Binary	From 2 ⁸ to 2 ¹³	1	From 2 ⁸ to 2 ¹³	Binary	4 1/2" W x 7 1/4" x 1.5" H PC card or 9.5" or 19" W rack mount
MXDS90-DBC-Z-Y	BCD	Up to 9999	1	From 999 to 9999	Binary	

- X - Add 8 to 13 depending on binary output desired.
- Z - Add 10 (999) to 100 (9999) depending on BCD output desired.
- Y - Add 3 to 16 depending on number of channels required
- 1) For display add R to Part Number (MXDSR90)
- 2) For DC output ADD A after number of channels (± 10V for ± 180° or 0 to 10V for 0° to 360° available)
- 3) Built in ± 15 & + 5V DC Power Supplies - Add P to Part Number
- 4) NEMA 12 Transducers - Add H to part Number (HMXDS90)

ORDERING GUIDE

To order a 10 channel encoder with a 2000 BCD output, display, DC output, Built in DC power supplies, and Nema 12 transducers, use part number HMXDSR90-DBC-20-10AP.

FEATURES

- Accepts up to 16 Shaft inputs
- Binary Address
- Easily Interfaces to Microprocessors
- Binary or BCD Outputs
- Custom scale factors
- Linear DC Outputs Available
- Absolute with Memory
- Rugged and Reliable
- Nema 12 Transducers



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**BCD TO BINARY CONVERTERS
BCD 250 SERIES**

SPECIFICATIONS - Pt. No. BCD 250

RESOLUTION:	.1° input, .087° output
INPUT:	Scaled BCD (0 to 359.9°)
DIGITAL:	TTL/DTL Compatible, parallel positive logic Fan out-5 TTL Loads
FAN IN:	1 TTL Load
DATA OUTPUT:	12 Bits Binary (MSB = 180°)
CONVERSION RATE:	500 Nanosec
ACCURACY:	± .1°
POWER REQUIREMENT:	+ 5V At 800 ma.
SIZE:	2.6 x 3.1 x .82" H module
OPERATING TEMPERATURE RANGE:	0°C-70°C (BCD250-1) -55°C to 105°C (BCD250-2)
STORAGE:	-55°C to 125°C

DESCRIPTION

The BCD Series of BCD to Binary Converters will convert 4 digits of scaled BCD angle data with a full scale of 359.9° into 12 Bits of binary angle data (MSB = 180°). These units are entirely digital, require no timing or control signals and do this conversion in less than 500 nano-seconds. Logic levels are TTL/DTL compatible and + 5V DC power is required. They are packaged in a 2.6 x 3.1 x .82" H PC board mounting module.

