



E21 Series

Compact and low profile, E21 Series Encoders provide parameters of reflective optical technology, transmissive optical technology with and without differential line drivers, and multitude of line counts.

Modular and bearing construction options. Bearing style encoders provide significant performance upgrades in demanding applications. Factory installed and tested for quick start-up.

■ Benefits

- Resolutions from 120 to 8192
- TTL Quadrature output
- Frequency response to 960 kHz
- Low power consumption, 5V @ 60mA max.
- Locking connector

■ Optional Assemblies

- Index pulse
- Differential line driver with complementary outputs
- Detachable cable with optional axial orientation
- Through hole cover

■ Characteristics

Encoder Data		Units	Part No.	
			E21C	E21D
Available Resolutions			120,125,128, 250, 256, 300, 360	500, 512, 1000, 1024, 1600, 2000, 2048, 3200, 4000, 4096, 6400, 8000, 8192
Output			2-Channel Quadrature	2-Channel Quadrature with Index
Output Interface			TTL Compatible	TTL Compatible
Supply Voltage	V _{CC}	VDC	4.5 to 5.5	4.5 to 5.5
Supply Current	I _{CC}	mA	20 max.	60 max.
High Level Output Voltage	V _{OH}	V	2.4 min.	2.4 min.
High Level Output Voltage	V _{OL}	V	0.4 max.	0.4 max.
Max. Operating Frequency	f _{MAX}	kHz	40 (120-360 CPR)	55 (500-512 CPR)
				110 (1000-1024 CPR)
				220 (2000-2048 CPR)
				240 (1600 CPR)
				480 (3200-4096 CPR)
				960 (6400-8192 CPR)
Operating Temperature	Θ _{MAX}	°C	-20 to +85	-20 to +85
Encoder Weight (Mass)	W _E	oz	0.11	0.11
		g	3.1	3.1

■ Connection Chart

PIN	E21C ¹	E21D ¹	Optional Cable
1	Channel A		Blue/White
2	Vcc		White
3	Encoder Ground		Black
4	Channel A		Blue
5	Channel B		Violet/White
6	Channel B		Violet
7	—	Index I	Green/White
8	—	Index I	Green

¹Optional differential LD connections shown in gray.

■ Optional Cables

Cable for Encoder	Part No.	Description
E21C	84-90-3	2-Channel, Radial, Differential Outputs
E21D	84-90-1	3-Channel, Radial, Differential Outputs

Dimensional Drawings: E21C • E21D

