

Corrigendum

E-Tender Notice No. NITJ/DRC/PUR/ME/13/2022 (Encoders/Optical Potentiometers and Microcontroller Systems).

In response to email dated:26/08/2022 received from the department of Mechanical Engineering, NITJ and in order to procure the equipment of the required specifications, the elaborated specifications are now given, so that there is no ambiguity.

Elaborated Specification of Encoders/ Optical Potentiometers:

Electric characteristics

Input voltage	DC 5V \pm 0.25V
Dissipation	40 mA maximum
Effective electric angle	320°
Output voltage	+0.5 ~ +4.5V
Absolute linearity	\pm 3.0 %
Temperature sensitivity	\pm 3.0 % FS (2.0 % FS/-30~70 °C)
Temperature medium drift	\pm 40 mV
Insulation resistance	100 M Ω (at DC500V) minimum
Dielectric strength	AC500 V (1 min)

Mechanical characteristics

Starting torque	0.147 mN-m maximum (at normal temperature.)
Maximum rotational speed	1500 min ⁻¹
Mechanical angle	360° continuous
Rotational life	1 \times 10 ⁸ revolutions (at 25° C, 200 min ⁻¹)
Vibration	147 m/s ² {15G} 30 ~ 200 Hz, 30h
Shock	294.2 m/s ² {30G} minimum
Strength of tighten screw	0.49 N-m {5 kgf-cm} maximum
Maximum diameter	22 mm
Shaft diameter	3 mm (With D cut of 1 mm)
Net weight	12 g

Elaborated Specification of Microcontroller Systems:

Microcontroller	AT91SAM3X8E (32-bit ARM core microcontroller)
Operating Voltage	3.3V
Input Voltage (required)	7-12V
Input Voltage (limits)	6-20V
Digital I/O Pins	54 (of which 12 should provide PWM output)
Analog Input Pins	12 (With 12 bit ADC)
Analog Outputs Pins	2 (DAC)
Total DC Output Current on all I/O lines	130 mA
DC Current for 3.3V Pin	800 mA
DC Current for 5V Pin	800 mA
Flash Memory	512 KB
SRAM	96 KB (two banks: 64KB and 32KB)

The dates as indicated at Page no. 02 of the tender shall remain the same.


Dean Research and Consultancy