ANALOG MODULE SPECIFICATION

Module	S-7011	S-7012	S-7013	S-7014	S-7017	S-7018	S-7021	S-7024
Resolution	16 bits	16 bits	16 bits	16 bits	16 bits	16 bits	12 bits	14 bits
No of inputs	1 diff	1 diff	1 diff	1 diff	8 diff	8 diff		
No of outputs	–	–	–	–	–	–	1	4
Input Type	DC voltage, 0–20mA, T/couple	DC voltage, 0–20mA	RTD Pt,Ni 2/3/4 Wire	DC voltage, 0–20mA	DC voltage, 0–20mA	DC voltage, 0–20mA, T/couple	Analog o/p mA, V	Analog o/p mA, V
Sampling Rate	10Hz	10Hz	10Hz	10Hz	10Hz	10Hz		
Voltage Range	±15mV ±50mV ±100mV ±500mV ±1V ±2.5V	±150mV ±500mV ±1V ±5V ±10V		±150mV ±500mV ±1V ±5V ±10V	±150mV ±500mV ±1V ±5V ±10V	±15mV ±50mV ±100mV ±500mV ±1V ±2.5V	0–10V	0–10V
Current Input/ Output	±20mA	±20mA		±20mA	±20mA	±20mA	4–20mA	4–20mA
Sensor Types	**Thermocouples** J=0°C to 760°C K=0°C to 1000°C T=-100°C to 400°C E=0°C to 1000°C R=500°C to 1750°C S=500°C to 1750°C B=500°C to 1800°C N=270°C to 1300°C C=0°C to 2320°C		**Pt100** **⚲=0.00385** –100°C to 100°C 0°C to 100°C 0°C to 200°C 0°C to 600°C **⚲=0.003916** –100°C to 100°C 0°C to 100°C 0°C to 200°C 0°C to 600°C **Ni120** –80°C to 100°C 0°C to 100°C			**Thermocouples** J=0°C to 760°C K=0°C to 1000°C T=-100°C to 400°C E=0°C to 1000°C R=500°C to 1750°C S=500°C to 1750°C B=500°C to 1800°C N=270°C to 1300°C C=0°C to 2320°C		
4½ Digit LED Display	Version S-7011D	Version S-7012D	Version S-7013D					
Isolation Channel to Ground	3000V	3000V	3000V	3000V	3000V	3000V		
Bandwidth	4Hz	4Hz	4Hz	4Hz	13.1Hz	13.1Hz		
Accuracy	±0.05%	±0.05%	±0.05%	±0.05%	±0.1%	±0.05%	±1% of FSR	±1% of FSR
Zero drift	±0.033ppm/°C	±0.033ppm/°C	0.3μV/°C	6μV/°C	±0.03μV/°C	±0.033ppm/°C	±0.033ppm/°C	±0.033ppm/°C
Span Drift	25ppm/°C	25ppm/°C	25ppm/°C	25ppm/°C	25ppm/°C	25ppm/°C	25ppm/°C	25ppm/°C
C.M.R.@50–60Hz	150dB	150dB	92dB	150dB	92dB	150dB		
N.M.R.@50–60Hz	100dB	100dB	100dB	100dB		100dB		
Over voltage protection	±10V	±10V	±10V	±10V	±10V	±35V	±10V	±10V
Digital Input	1	1	–	1				
Digital Output	2	2		2				
Even Counter	Yes	Yes		Yes				
High/Low Alarm	Yes	Yes		Yes				
Dual Watchdog Timer	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Power Consumption	7011–1.5W 7011D–2.2W	7012–1.2W 7012D–2.2W	7013–2W 7013D–2.2W	2.2W	2W	2W	2W	2W
Power Requirements	+10 to 30 V DC	+10 to 30 V DC	+10 to 30 V DC	+10 to 30 V DC	+10 to 30 V DC	+10 to 30 V DC	+10 to 30 V DC	+10 to 30 V DC
Weight	130gms	130gms	130gms	130gms	130gms	130gms	130gms	130gms
Size l.w.d. mm	122x72x45	122x72x45	122x72x45	122x72x45	122x72x45	122x72x45	122x72x45	122x72x45
Humidity	5–95% non condensing	5–95% non condensing	5–95% non condensing	5–95% non condensing	5–95% non condensing	5–95% non condensing	5–95% non condensing	5–95% non condensing
Operating Temp	–10 to +60	–10 to +60	–10 to +60	–10 to +60	–10 to +60	–10 to +60	–10 to +60	–10 to +60
Storage Temp	–20 to +80	–20 to +80	–20 to +80	–20 to +80	–20 to +80	–20 to +80	–20 to +80	–20 to +80