Modules

Solartron also offers a range of modules for third party sensors and for general instrumentation tasks.

The Analogue Input Module integrates third party transducers (e.g. temperature, force, pressure) to the Orbit network. The Digital Input/ Output module enables switches or control lines and the Encoder Input Module ties in rotary or line scale incremental type encoders (TTL).

	Digimatic input Module (DIM)	Analogue Input Module (AIM)	Encoder Input Module (EIM)	Digital input-output Module (DIOM)
Power Requirement				
Voltage Range (VDC)	5 ±0.25			
Current Consumption[1] (mA)	41	Up to 154 depending on input type	49	42 (no load)
Signal Input [2]				
Input Type	Digimatic Interface	Analogue Voltage or Current	Incremental Encoder	8 channel Input/Output
Input Voltage (VDC)	-	0-24, 0-10, 0-5, ±10, ±5	30 max	0 to 30
Input Currents (mA)	-	4-20, ±20, 0-20	< 10	1 per Channel
Options	-	Special PT100 module available	Single ended or differential, HTL	-
Signal Output				
Voltage Output	-	-		Open drain up to 30 V
Current Output	-	-		50 mA for each output
Reading Speed	-	Up to 3906 readings/second		
Interpolation Rate	-	-	x1, x2, x4 programmable	-
Measurements performance				
Warm-up	-	95% accuracy after 5 mins	-	-
Linearity (%FSO)	-	0.05		
Bandwidth	-	460 Hz	1.2 MHz max frequency	DC
Measurement Modes	Standard	Standard/Dynamic/Buffered	Standard/Dynamic	Standard/Dynamic
Environmental				
Operating Temp. Range (°C)	0 to +60			
Storage Temp. Range (°C)	-20 to +85			
IP Rating	43			
Mechanical & Connections				
Transducer	Various connector options			
Enclosure - Size (mm)	65 x 61 x 18 excluding connector (refer to PIE drawings on page 30)			
Weight (g)	160			
Material	Nylon and ABS plastic			

1 Excludes sensor consumption. **2** Transducer interface.

Accessories

PSIM (Power Supply Interface Module)

For use with multi-channel systems needing more power than available from the host computer. The power supply can also extend the network beyond the normal 10m per port limit depending on cable type.

PSIM Transformer (not shown)

For use with Power Supply Interface Module versions PSIM-AC.

Other accessories avaliable include high perfomance data cables to ensure high speed orbit communication.

	PSIM-AC	PSIM-DC	PSIM-5V
Output voltage	5.1VDC @ 1.8A max.		
Operating temp. range (°C)	0 to +60		
Drive capability	Up to 31 Orbit modules dependent on type		
Supply voltage	90 to 264VAC @ 1 A max.	10 to 30VDC	0 to 30
Supply frequency (Hz)	47 to 440	-	-
Termination	IEC320 plug (supplied with 2m lead and local AC supply connector)	2m flying lead	5m flying lead (input directly to the module. There is no transformer)
Cable length (m)	2 (between module and power supply)		-
Dimensions	As PIE plus T-CON (see page 30). Module does not separate		

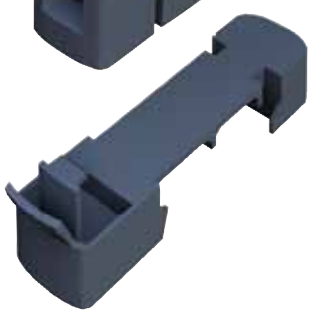
PSIM dimensions are identical to PIE plus T-Con, however the unit does not separate

PIE (Probe Interface Electronics)

Fitted to all Orbit products

T-Con connector

The Orbit Network 'building block'



35mm DIN rail connector

Supplied as standard

Also see...

Dimensions and drawings Page 30 ▶