

ENERGY SOLAR

Control Tech Products: Advanced Power Control and Distribution Equipment for Aerospace

Explore our Control Tech Products for spacecraft power management. Featuring a wide BUS voltage range and multiple regulation methods, our equipment provides reliable power distribution for satellites, rockets, and spacecraft. Equipped with intelligent control and modular design, these products ensure stable operation even in extreme environments.

Product Introduction

Our **Control Tech Products** represent a paradigm shift in aerospace power control and distribution equipment. With a wide BUS voltage range and multiple regulation methods, our equipment is tailored to meet the diverse needs of modern aerospace applications. From satellites to rockets and spacecraft, our products ensure reliable and efficient power distribution in any environment.

Product Image

Product Features

- Highly Reliable:** Our products undergo rigorous environmental adaptability testing to ensure stable operation in extreme conditions.
- Intelligent Control:** Equipped with overcurrent protection and automatic control of self-powered energy, our products offer intelligent power management.
- Modular Design:** Using advanced materials and technology, our products feature a modular or plug-in design, reducing weight and facilitating expansion and maintenance.

Technical Specifications

PCDU Product Series

Indicator parameters	series 1	series 2	series 3	series 4	series 5
Output voltage (V)	33~45.1	33~45.1	21~28.7	28±0.4V	21~29.4V
Adjustment method	S3R Unregulated	MPPT Unregulated	S3R Unregulated	S4R Full adjustment	MPPT Unregulated
Output power (W)	3000	3150	1000	400	800
Solar array regulator - Working current (single stage) (A)	≤7(350W)	≤9	≤7	≤7.2	≤7
Working temperature	-25℃~60℃	-25℃~60℃	-25℃~60℃	-25℃~60℃	-25℃~60℃
Efficiency	≥95% (Typical value)	≥92% (Typical value)	≥95% (Typical value)	≥95% (Typical value)	≥92% (Typical value)
Efficiency stability	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
Self-powering function	YES	YES	YES	YES	YES
Unlock circuit	Memory alloy Hot knife Pin puller	Memory alloy Hot knife Pin puller	Memory alloy Hot knife Pin puller	Memory alloy Hot knife Pin puller	Memory alloy Hot knife Pin puller
BUS communication	CAN/RS422	CAN/RS422	—	CAN/RS422	—
Life expectancy (years)	>5	>5	>5	>5	>5
Weight (kg)	11.5	≤6	≤8	≤6.5	≤8
External dimensions (mm)	280×260×190	400×400×50	280×180×200	210×216×170	225×274×190

PCDU Product Series

Indicator parameters	series 1	series 2
BUS voltage (V)	42	28
Number of primary bus distribution circuits	——	10 Lines
Number of secondary distribution circuits	28 Lines	13 Lines
Primary distribution output power (W)	——	1500
Secondary distribution output power	+5.5V 100W +12V 35W -12V 12W	+5.2V 25W +12V 90W -12V 2W
Life expectancy (years)	>5	>5
Weight (kg)	≤1.4	≤0.9
External dimensions (mm)	160×233.35×35	160×233.35×26

Typical Applications

Widely used in various aerospace devices, such as satellites, rockets, spacecraft, etc., it can provide stable and reliable power support for aerospace equipment, ensuring the successful execution of aerospace missions.

Explore more of our [aerospace solutions](#).