

load	Man./Model	qnty	voltage (Volts)	current (Amps)	power (watts)	Total power		Watts	duty cycle (% ON)	Notes
+5V										
Heading	PSN ForceField TCM	1.00	5.00	0.12	0.60	0.60				less than 20 mA typical
Fiber Mux	Focal 20907	1.00	5.00	1.00	5.00	5.00				<5Watts typical on each end
Serial Expansion	Focal 907-SER	1.00	5.00	1.50	7.50	7.50				0.75A typ, 1.5A max
					0.00	0.00	5V Power Sum	13.10		
+12V										
CTD	FSI micro-CTD	1.00	12.00	0.12	1.44	1.44			100	
Payload		1.00	12.00	0.00	0.00	0.00				
					0.00	0.00	12V Power Sum	1.44		
+24V										
Color Pencil Cam	Insite Tritech Nova	2.00	24.00	0.18	4.20	8.40				
Sonar	Imagenex 881A	1.00	24.00	0.20	4.80	4.80			100	Power listed as <5W
B&W Camera	Insite Tritech IT-1000	1.00	24.00	0.15	3.60	3.60				15-30V in, 150 mA typical
Lights 1& 2	DSPL Multi-SeaLite	2.00	24.00	3.20	76.80	153.60				Check the current draw on bench
Lights 3&4	DSPL LED lights?	2.00								
DVL	linquest Navquest 600	1.00	24.00	3.33	79.92	79.92				3.33 A max 0.2 A typical
Tilt motor	MBARI stock	1.00	24.00	3.00	72.00	72.00				
Manipulator	ECA ARM-5E	1.00	24.00	5.00	120.00	120.00				5A max
Bottom Side Cntrl	Wago stack	1.00	24.00	0.85	20.40	20.40				
HD Cam	Sony HDR-SR12	1.00	24.00	0.30	7.20	7.20				TOTAL GUESS
Rotate motor 2	same as tilt	1.00	24.00	3.00	72.00	72.00				
Rotate motor 3	same as tilt	1.00	24.00	3.00	72.00	72.00				
Science Port		2.00	24.00	2.00	48.00	96.00				
					0.00	0.00	24V Power Sum	709.92		
+48V										
Thrusters	Cleveland Mtr	6.00	48.00	11.45	549.60	3297.60				Max is 600W
Motor Controllers	Elmo Whistle	6.00	48.00	0.05	2.50	14.98				Chad 24V 80mA
							48V Power Sum	3312.58		
Total Power						4037.04				
Total Power- PreConverter					At 85% eff	4642.59				

Max Power at Vehicle	4941	Watts	Based on Ventana tether
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