

MARS Science Harness Specification

Conductor Pair	Conductor Number	Conductor Usage	Operating Voltage (VDC)	Withstand Voltage (VDC)	Max Current (Amps)	Wire gage (awg)
1	1	+400 VDC	400	1000	23.3	12 preferred 14 minimum
1	2	400VDC Common	400	1000	23.3	12 preferred 14 minimum
2	3	+48 VDC	48	1000	27.1	12 preferred 14 minimum
2	4	48VDC Common	48	1000	27.1	12 preferred 14 minimum
3	5	Ethernet Pair 1	< 5	1000	< 0.100	22-24
3	6	Ethernet Pair 1	< 5	1000	< 0.100	22-24
4	7	Ethernet Pair 2	< 5	1000	< 0.100	22-24
4	8	Ethernet Pair 2	< 5	1000	< 0.100	22-24
5	9	Timing	< 12	1000	< 0.100	22-24
5	10	Timing	< 12	1000	< 0.100	22-24
6	11	Unassigned	< 48	1000	< 1	22-24
6	12	Unassigned	< 48	1000	< 1	22-24

Conductor Requirements Table
Table –1