


# MATERIAL DECLARATION SHEET



Product Part Number	1540-01			
Product Line	Outdoor PoE			
MSL	1			
RoHS Compliant	Yes	Compliance Date	N/A	

No.	Construction Element(subpart)	Homogeneous Material	Material weight [g]	Homogeneous Material\Substances	CASRN if applicable	Materials Mass %	Material Mass % of total unit wt.	Subpart mass of total wt. (%)
1	Modified enclosure	Polycarbonate	185.0000	Lexan 945 U	111211-39-3	100.0000	57.5190477	57.51905
2	O-ring	Nitrile	1.0000	Nitrile	9005-98-5	100.0000	0.3109138	0.31091
3	Screw M4x20	Stainless steel	8.2400	Iron	7439-89-6	70.0000	1.7933506	2.56193
				Chromium	7440-47-3	19.0000	0.4867666	
				Nickel	7440-02-0	8.0000	0.2049544	
				Copper	7440-50-8	3.0000	0.0768579	

4	Cable grip	Nylon with neoprene seal	37.6200	Polychloroprene	9010-98-4	9.8884	1.1565992	11.69658
				Nylon 6	25038-54-4	90.1116	10.5399768	
5	PCB	FR4	22.0000	Glass fiber	65997-17-3	45.0000	3.0780463	6.84010
				Epoxy resin	26265-08-7	35.0000	2.3940360	
				Further additive	Trade secret	5.0000	0.3420051	
				Copper	7440-50-8	15.0000	1.0260154	
6	Dual Uni-directional TBU Device	Silicon	0.0330	Silicon	7440-21-3	100.0000	0.0102602	0.01026
		Copper alloy	0.2900	Copper	7440-50-8	95.6500	0.0862428	0.09016
				Iron	7439-89-6	2.1800	0.0019656	
				Phosphorus	7723-14-0	0.0300	0.0000270	
				Zinc	7440-66-6	0.1300	0.0001172	
				Silver	7440-22-4	2.0100	0.0018123	
		Silver epoxy	0.0109	Epoxy resin	Trade secret	2.9900	0.0001013	0.00339
				Functionalized ester	Trade secret	7.0100	0.0002376	
				Polymeric compound	Trade secret	2.9900	0.0001013	
				Silver	7440-22-4	87.0100	0.0029487	

		Gold bond wire	0.0011	Gold	7440-57-5	100.0000	0.0003327	0.00033
		Epoxy resin	0.2500	Silica fused	60676-86-0	90.4900	0.0703365	0.07773
				Epoxy resin	Trade secret	4.7000	0.0036532	
				Phenol resin	Trade secret	4.7000	0.0036532	
				Carbon black	1333-86-4	0.1100	0.0000855	
		Tin plating	0.0170	Tin	7440-31-5	100.0000	0.0052855	0.00529
7	GDT	Tin plated Alloy 42 electrode	9.8300	Iron	7439-89-6	56.4000	1.7237433	3.05628
				Nickel	7440-02-0	40.8000	1.2469632	
				Tin	7440-31-5	2.8000	0.0855759	
		Ceramic	5.8500	Aluminum oxide	1344-28-1	95.0000	1.7279033	1.81885
				Silicon dioxide	7631-86-9	5.0000	0.0909423	
		Tin plated Copper electrode	3.3100	Copper	7440-50-8	99.2000	1.0208916	1.02912
				Nickel	7440-02-0	0.2000	0.0020582	
				Tin	7440-31-5	0.6000	0.0061747	
		Cusil™	0.3500	Silver	7440-22-4	72.0000	0.0783503	0.10882
				Copper	7440-50-8	28.0000	0.0304695	

Gas	0.0049	Argon	7440-37-1	100.0000	0.0015235	0.00152
Green Ink	0.0070	Ink (Proprietary mixture)	Trade secret	100.0000	0.0021764	0.00218
Tin plated Copper wire	1.0500	Copper	7440-50-8	97.0000	0.3166657	0.32646
		Tin	7440-31-5	3.0000	0.0097938	
Tin plated Alloy 25 failsafe clip	1.6900	Copper	7440-50-8	95.3000	0.5007484	0.52544
		Beryllium	7440-41-7	1.9000	0.0099834	
		Tin	7440-31-5	2.8000	0.0147124	
Tin plated Alloy C260 failsafe support	0.2300	Copper	7440-50-8	68.7000	0.0491275	0.07151
		Zinc	7440-66-6	29.5000	0.0210955	
		Tin	7440-31-5	1.8000	0.0012872	
CASTIN alloy solder for failsafe	0.2600	Tin	7440-31-5	96.2000	0.0777658	0.08084
		Silver	7440-22-4	2.5000	0.0020209	
		Copper	7440-50-8	0.8000	0.0006467	
		Antimony	7440-36-0	0.5000	0.0004042	

8	TVS diode	Epoxy resin	0.0105	Silica fused	60676-86-0	87.7000	0.0028630	0.00326
				Epoxy resin	Trade secret	5.0000	0.0001632	
				Epoxy CN	29690-82-2	2.0000	0.0000653	
				Phenol resin	Trade secret	5.0000	0.0001632	
				Carbon black	1333-86-4	0.3000	0.0000098	
		Copper alloy	0.0080	Copper	7440-50-8	94.5600	0.0023520	0.00249
				Iron	7439-89-6	2.2300	0.0000555	
				Zinc	7440-66-6	0.0100	0.0000002	
				Phosphorus	7723-14-0	0.0300	0.0000007	
				Silver	7440-22-4	3.1700	0.0000788	
		Silicon chip	0.0008	Silicon	7440-21-3	93.7400	0.0002332	0.00025
				Aluminum	7429-90-5	3.0500	0.0000076	
				Nickel	7440-02-0	3.0800	0.0000077	
				Gold	7440-57-5	0.1300	0.0000003	
		Silver epoxy	0.0002	Epoxy resin	Trade secret	2.9900	0.0000015	0.00005
				Functionalized ester	Trade secret	7.0100	0.0000035	
				Polymeric compound	Trade secret	2.9900	0.0000015	
				Silver	7440-22-4	87.0100	0.0000433	

		Gold bond wire	0.0001	Gold	7440-57-5	100.0000	0.0000280	0.00003
		Tin plating	0.0002	Tin	7440-31-5	100.0000	0.0000513	0.00005
9	Terminal lug	tin plated copper	0.3100	Copper	7440-50-8	99.9766	0.0963607	0.09638
				Tin	7440-31-5	0.0234	0.0000226	
10	Wire green 14 AWG	Copper wire	16.0000	Copper	7440-50-8	81.9000	4.0742141	4.97462
		Insulation		Polyvinyl chloride	9002-86-2	18.1000	0.9004063	
11	Fuse	Ceramic	1.0400	Aluminum oxide	1344-28-1	96.0000	0.3104163	0.32335
				Silicon dioxide	7631-86-9	2.0000	0.0064670	
				Calcium oxide	1305-78-8	2.0000	0.0064670	
		Solder	0.3400	Tin	7440-31-5	90.0000	0.0951396	0.10571
				Antimony	7440-36-0	8.0000	0.0084569	
				Copper	7440-50-8	2.0000	0.0021142	
		Fuse element	0.0700	Tin	7440-31-5	69.7000	0.0151695	0.02176
				Copper	7440-50-8	12.3000	0.0026770	
				Fiber	N/A	18.0000	0.0039175	

		Fuse cap	0.8000	Copper	7440-50-8	65.0000	0.1616752	0.24873
				Zinc	7440-66-6	35.0000	0.0870559	
		Nickel plating on inner plate	0.0220	Nickel	7440-02-0	100.0000	0.0068401	0.00684
		Tin plating on outer plate	0.0220	Tin	7440-31-5	100.0000	0.0068401	0.00684
12	Solder Paste	96.5Sn/3.5AG	0.1000	Tin	7440-31-5	96.5000	0.0300032	0.03109
				Silver	7440-22-4	3.5000	0.0010882	
13	Solder wire	SAC387	0.1000	Tin	7440-31-5	95.5000	0.0296923	0.03109
				Silver	7440-22-4	3.8000	0.0011815	
				Copper	7440-50-8	0.7000	0.0002176	
14	Screw M3x8	Zinc plated steel	2.8000	Iron	7439-89-6	99.9900	0.8704715	0.87056
				Zinc	7440-66-6	0.0100	0.0000871	
15	Screw 10-32	Brass	3.5000	Copper	7440-50-8	70.0000	0.7617387	1.08820
				Zinc	7440-66-6	30.0000	0.3264595	
16	Beveled washer	Brass	0.7500	Copper	7440-50-8	70.0000	0.1632297	0.23319
				Zinc	7440-66-6	30.0000	0.0699556	

17	Tab washer	Brass	0.8700	Copper	7440-50-8	70.0000	0.1893465	0.27049
				Zinc	7440-66-6	30.0000	0.0811485	
18	o-ring	Nitrile	0.0100	Nitrile	9005-98-5	100.0000	0.0031091	0.00311
19	Nut	Brass	2.2800	Copper	7440-50-8	70.0000	0.4962184	0.70888
				Zinc	7440-66-6	30.0000	0.2126650	
20	o-ring	Nitrile	0.5000	Nitrile	9005-98-5	100.0000	0.1554569	0.15546
21	Washer	Brass	1.6200	Copper	7440-50-8	70.0000	0.3525762	0.50368
				Zinc	7440-66-6	30.0000	0.1511041	
22	Acrylic conformal coating	HumiSeal® 1B73	0.0100	Acrylic resin	Trade secret	100.0000	0.0031091	0.00311
23	Modular jack	insert	3.1400	Polybutylene terephthalate	30965-26-5	48.2500	0.4710499	0.97627
				Glass fiber	65997-17-3	28.8000	0.2811655	
				Brominated flame retardants	71342-77-3	15.0000	0.1464404	
				Diantimony trioxide	1309-64-4	5.0000	0.0488135	
				Talc	14807-96-6	0.5500	0.0053695	
				Carbon black	1333-86-4	0.5500	0.0053695	
				Organic phosphorous compound	-	0.0700	0.0006834	
				Colorant	-	0.6500	0.0063458	
				Misc., not to declare	-	1.1300	0.0110318	



4 in-line contacts A	1.2400	Copper	7440-50-8	92.7515	0.3575875	0.38553
		Lead	7439-92-1	0.0199	0.0000767	
		Cadmium	7440-43-9	0.0010	0.0000038	
		Iron	7439-89-6	0.0995	0.0003835	
		Tin	7440-31-5	6.2173	0.0239698	
		Zinc	7440-66-6	0.1990	0.0007670	
		Phosphorus	7723-14-0	0.1890	0.0007287	
		Nickel	7440-02-0	0.5032	0.0019401	
		Gold	7440-57-5	0.0196	0.0000755	
		Cobalt	7440-48-4	0.0001	0.0000004	
4 in-line contacts B	1.2400	Copper	7440-50-8	92.7515	0.3575875	0.38553
		Lead	7439-92-1	0.0199	0.0000767	
		Cadmium	7440-43-9	0.0010	0.0000038	
		Iron	7439-89-6	0.0995	0.0003835	
		Tin	7440-31-5	6.2173	0.0239698	

				Zinc	7440-66-6	0.1990	0.0007670	
				Phosphorus	7723-14-0	0.1890	0.0007287	
				Nickel	7440-02-0	0.5032	0.0019401	
				Gold	7440-57-5	0.0196	0.0000755	
				Cobalt	7440-48-4	0.0001	0.0000004	
		Shell	4.6400	Copper	7440-50-8	65.6795	0.9475192	1.44264
				Lead	7439-92-1	0.0499	0.0007192	
				Cadmium	7440-43-9	0.0073	0.0001060	
				Zinc	7440-66-6	33.6148	0.4849411	
				Iron	7439-89-6	0.0496	0.0007154	
				Tin	7440-31-5	0.5988	0.0086390	
24	MOV	Zinc oxide disc	1.1700	Zinc oxide	13114-13-2	86.0000	0.3128414	0.36377
				Silver	7440-22-4	1.8000	0.0065478	
				Metal oxides (trade secret)	N/A	12.2000	0.0443798	
		Epoxy resin	0.7200	Epoxy resin	25036-25-3	50.0000	0.1119290	0.22386
				Silica fused	60676-86-0	50.0000	0.1119290	

		Tin copper clad steel wire	1.1400	Iron	7439-89-6	55.0000	0.1949429	0.35444
				Copper	7440-50-8	40.0000	0.1417767	
				Tin	7440-31-5	5.0000	0.0177221	
		Soldering bar	0.1350	Tin	7440-31-5	96.5000	0.0405043	0.04197
				Silver	7440-22-4	3.0000	0.0012592	
				Copper	7440-50-8	0.5000	0.0002099	
		<b>Total</b>	<b>321.6327</b>					

**This Document was updated on: July, 2015**

**Important remarks:**

1. It is the responsibility of the user to verify they are accessing the latest version.