

AIS-ILIS1 V6 Electronics Bill of Materials									
Circuit Designation	Part Description	Manufacturer	Supplier	Supplier #	Cost	Quantity	Total	Link	
HV1	5AV3500-P	Pico Electronics	Pico Electronics	5AV3500-P	\$ 262.18	1	\$262.18	https://www.picoelectronics.com/node/13282	
HV2	5AV3500-N	Pico Electronics	Pico Electronics	5AV3500-N	\$ 262.18	1	\$262.18	https://www.picoelectronics.com/node/13283	
RR1, RR2	119-1-A-5/3D	Pickering Electronics	Testco	119-1-A-5/3D	\$ 10.78	2	\$21.56	https://www.testco-inc.com/search?partnumber=119-1-A&byKeyword=0&x=0&y=0	
U1, U2	TPS2041B High Side Load Switch	Texas Instruments	Digikey	296-29758-1-ND	\$ 4.09	2	\$8.18	https://www.digikey.com/product-detail/en/texas-instruments/TPS2041BMDBVTEP/296-29758-1-ND/2767606	
Q1, Q2	60V 3.5A MOSFET SOT-23-3	Nexperia USA Inc.	Digikey	1727-8589-1-ND	\$ 0.38	2	\$0.76	https://www.digikey.com/product-detail/en/nexperia-usa-inc/PMV37ENEAR/1727-8589-1-ND/10261015	
R1	1G 2W High Voltage Pulse Withstanding Resistor SMT 2512	Stackpole Electronics, Inc.	Digikey	HVCB2512FKC1G00CT-ND	\$ 8.32	1	\$8.32	https://www.digikey.com/product-detail/en/stackpole-electronics-inc/HVCB2512FKC1G00/HVCB2512FKC1G00CT-ND/1948091	
R2	1M 0.1% 1/4W High Voltage Resistor SMT 1206	Vishay Dale	Digikey	541-2320-1-ND	\$ 1.35	1	\$1.35	https://www.digikey.com/product-detail/en/vishay-dale/TNPV12061M00BEEN/541-2320-1-ND/5218694	
R3	1K 0.1% 1/4W Resistor SMT 1206	Vishay Dale	Digikey	541-3845-1-ND	\$ 0.89	1	\$0.89	https://www.digikey.com/product-detail/en/vishay-dale/TNPW12061K00BEEN/541-3845-1-ND/7355204	
R4, R5	10K 0.1% 1/4W Resistor SMT 1206	Vishay Dale	Digikey	TNP10.0KACCT-ND	\$ 0.69	2	\$1.38	https://www.digikey.com/product-detail/en/vishay-dale/TNPW120610K0BEEA/TNP10-0KACCT-ND/1857139	
R6, R7, R8	100K 1% 2W High Voltage Pulse Witshatnding SMT 2512	Stackpole Electronics, Inc.	Digikey	HVCB2512FKC100KCT-ND	\$ 3.08	3	\$9.24	https://www.digikey.com/en/products/detail/stackpole-electronics-inc/HVCB2512FKC100K/1948085	
R9	100K 1% 0.4W Through Hole	Vishay Dale	Digikey	BC100KXCT-ND	\$ 0.22	1	\$0.22	https://www.digikey.com/en/products/detail/vishay-beyschlag-draloric-bc-components/MBA02040C1003FRP00/336963	
C1a1, C1b1	130pF 10000V Ceramic C0G MLCC 2225	Kemet	Digikey	399-20948-1-ND	\$ 5.31	2	\$10.62	https://www.digikey.com/product-detail/en/kemet/C2225C131JKGAC7800/399-20948-1-ND/10131770	
C2	470pF 1000V C0G 1206	Kemet	Digikey	399-16715-1-ND	\$ 0.91	1	\$0.91	https://www.digikey.com/product-detail/en/kemet/C1206C471KDGACAU0/399-16715-1-ND/8110081	
C3, C4, C5, C6	0.1uF 100V C0G 1206	TDK Corporation	Digikey	445-172694-1-ND	\$ 1.08	4	\$4.32	https://www.digikey.com/product-detail/en/tdk-corporation/CGA5L1C0G2A104J160AC/445-172694-1-ND/5023420	
J1	Connector Header Vertical 8 Position 2.54mm Pitch Male	Amphenol ICC	Digikey	609-3235-ND	\$ 0.45	1	\$0.45	https://www.digikey.com/product-detail/en/amphenol-icc-fci/67997-208HLP/609-3235-ND/1878495	

AIS-ILIS1 Hardware Bill of Materials							
Part Description	# of Single Pieces Per Built	Supplier	Supplier #	Cost	Quantity	Total	Link
Wave Disc Spring SS 0.719"ID 0.925"OD 0.01"T (10 pack)	1	McMaster-Carr	9714K99	\$ 16.23	1	\$16.23	https://www.mcmaster.com/9714K99/
4-40 3/4" L PEEK Pan Head Phillips Bolt (5 pack)	4	McMaster-Carr	96367A413	\$ 11.71	1	\$11.71	https://www.mcmaster.com/96367A413/
4-40 316 SS Nut (100 pack)	4	McMaster-Carr	90257A005	\$ 5.66	1	\$5.66	https://www.mcmaster.com/90257A005/
#4 Ring Connector 22-26 AWG	1	Digikey	298-10067-ND	\$ 0.16	1	\$0.16	https://www.digikey.com/en/products/detail/panduit-corp/P22-4R-M/450223
P4 Porous Frit Disc 25mm (emitter)	1	Quartz Scientific, Inc.	625025.4	\$ 49.50	1	\$49.50	https://www.qsiquartz.com/product/quartz-frit-25mm-5/
P3 Porous Frit Disc 25mm (reservoir)	1	Quartz Scientific, Inc.	625025.3	\$ 48.40	1	\$48.40	https://www.qsiquartz.com/product/quartz-frit-25mm-4/

AIS-ILIS1 Fuel Bill of Materials							
Part Description	# of Single Pieces Per Built	Supplier	Supplier #	Cost	Quantity	Total	Link
EMI-BF4 Ionic Liquid >98% (100g)	1g	Sigma Alderich	711721-100G	\$ 262.00	1	\$ 262.00	https://www.sigmaaldrich.com/catalog/product/aldrich/711721?lang=en&region=US&cm_sp=Insite-_-caSrpResults_srpRecs_srpModel_711721-100g_-srpRecs3-1