



**L.T.F.**

# UniDriver Series Dimmable LED Driver

## 12W DS12W-0000 120-277V UniDriver Series Constant Voltage

**UNIDRIVER**

True Tri Mode Dimming • ELV, TRIAC & 0-10V • 100-277V



Efficiency	> 78%
Power Factor	> 0.9
Case TC	85°C Max.
Protection	Input / Output
Storage	-30°C / +90°C
Humidity	95% RH Max.
IP Rating	IP 67
Class	Class 2 Power Supply
Dimming	0-10V, TRIAC, ELV

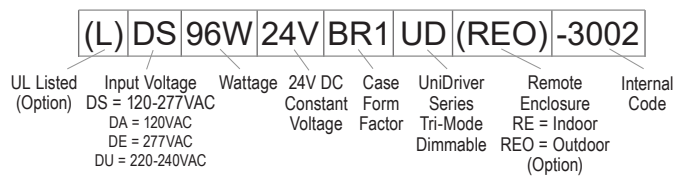


YEAR WARRANTY  
\* Ask for more information

### FEATURES

- Universal Input 120V-277V AC 50/60Hz
- **True Tri Mode Dimming** at all input voltages 0-10V, ELV & Triac
- Smooth, flicker free dimming 100%-0.1%
- Title 24 Compliant, AAA rating
- Class 2 power supply
- Isolated output power per NEC and UL safety requirements
- UL & ETL recognized/ listed, meets UL 8750, 1310 requirements
- Auto-reset; short circuit, overload and thermal protection
- Low profile, small form factor, junction box mountable
- Efficient, High power factor > 0.90

### MODEL NUMBER KEY (Constant Voltage)



### ELECTRICAL SPECIFICATIONS (Constant Voltage)

Constant Voltage					
Model #	Input Voltage	Wattage	Output Voltage	Load	Form Factor
DS12W12VMB1UD-0000	120-277V AC, 0.12A, 50/60Hz	12W	12V DC	12V DC LED, 1.0A Max.	MB1
DS12W24VMB1UD-0000			24V DC	24V DC LED, 0.5A Max.	
DS12W48VMB1UD-0000			48V DC	48V DC LED, 0.25A Max.	

L.T.F. L.L.C. PHONE: (847) 498-5832 FAX: (773) 337-5628 EMAIL: [LTFsales@lfttechnology.com](mailto:LTFsales@lfttechnology.com)

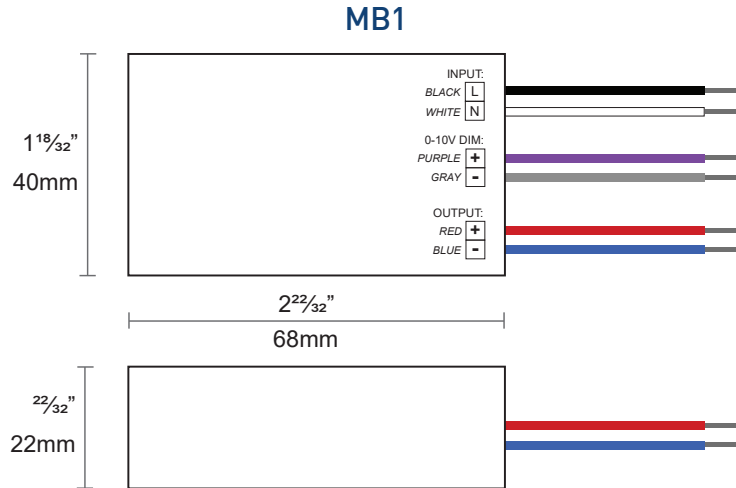
Company's Address: 11966 Oak Creek Pkwy. Unit H Huntley IL 60142 U.S.A. [www.lfttechnology.com](http://www.lfttechnology.com)

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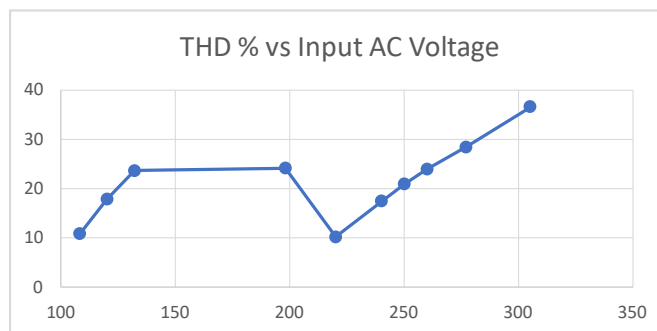
**MECHANICAL SPECS**

Form Factor	Dimensions
"MB1"	68mm x 40mm x 22mm



**ELECTRICAL CHARACTERISTICS (Full Power, No Dimming)**

VAC	I <sub>in</sub> (mA)	P <sub>in</sub> (W)	PF	THD %	V <sub>out</sub> (V)	I <sub>out</sub> (mA)	IFP (min.)	IFP (max)	P <sub>out</sub> (W)	Effi.	Flicker
108	147	15.59	0.983	10.83	24.19	507	443	573	12.26	78.7%	12.8%
120	134.6	15.5	0.959	17.84	24.19	507	443	573	12.26	79.1%	12.8%
132	125.9	15.46	0.95	23.6	24.19	507	443	573	12.26	79.3%	12.8%
198	75.4	14.47	0.969	24.14	23.94	491	443	535	11.75	81.2%	9.4%
220	72.9	15.19	0.946	10.15	24.19	507	450	462	12.26	80.7%	1.3%
240	70.3	15.33	0.907	17.46	24.19	507	447	567	12.26	80.0%	11.8%
250	69.4	15.4	0.886	20.92	24.19	507	447	567	12.26	79.6%	11.8%
260	68.8	15.48	0.865	23.92	24.19	507	441	567	12.26	79.2%	12.5%
277	67.9	15.64	0.83	28.39	24.19	507	426	571	12.26	78.4%	14.5%
305	67	15.73	0.768	36.61	24.19	507	436	578	12.26	78.0%	14.0%

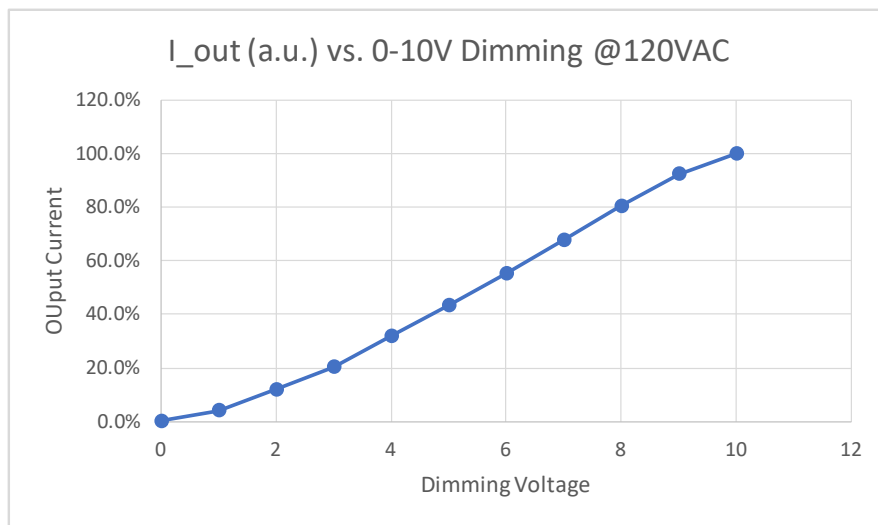




**DIMMING CHARACTERISTICS**

**120V AC 0-10V Dimming**

Dim V	I <sub>in</sub> (mA)	P <sub>in</sub> (W)	PF	THD %	V <sub>out</sub> (V)	I <sub>out</sub> (mA)	IFP (min.)	IFP (max)	P <sub>out</sub> (W)	Effi.	Flicker
10	135.5	15.52	0.954	19.07	24.19	505	442	568	12.22	78.7%	12.5%
9	122.1	13.96	0.952	18.19	13.61	467	412	511	6.36	45.5%	10.7%
8	103.6	11.71	0.942	19.87	22.66	406	357	445	9.20	78.6%	11.0%
7	85.2	9.52	0.93	21.25	21.66	342	307	374	7.41	77.8%	9.8%
6	68.7	7.56	0.917	22.11	20.67	279	246	303	5.77	76.3%	10.4%
5	53.9	5.84	0.902	22.68	19.7	219	196	240	4.31	73.9%	10.1%
4	40.9	4.34	0.883	23.11	18.75	161	142	174	3.02	69.6%	10.1%
3	29.1	2.98	0.852	23.2	17.69	103	93	111	1.82	61.1%	8.8%
2	21	2.05	0.811	23.09	16.69	60	54	64	1.00	48.8%	8.5%
1	15	1.32	0.729	25.2	15.67	21	19.6	25	0.33	24.9%	12.1%
0	11.8	0.902	0.634	28.3	14.68	0.5	0.5	0.5	0.01	0.8%	0.0%

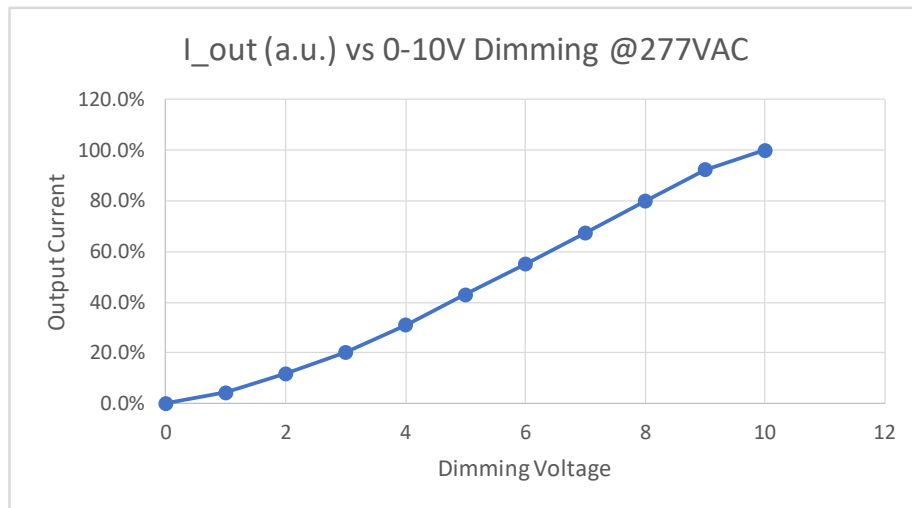




**DIMMING CHARACTERISTICS (Continued)**

**277V AC 0-10V Dimming**

Dim V	I <sub>in</sub> (mA)	P <sub>in</sub> (W)	PF	THD %	V <sub>out</sub> (V)	I <sub>out</sub> (mA)	IFP (min.)	IFP (max)	P <sub>out</sub> (W)	Effi.	Flicker
10	67.9	15.64	0.83	28.4	24.19	507	436	573	12.26	78.4%	13.6%
9	60.43	14.13	0.842	21	23.62	469	421	511	11.08	78.4%	9.7%
8	53.3	12.02	0.812	22.08	22.64	406	366	443	9.19	76.5%	9.5%
7	46.5	10.04	0.777	22.86	21.65	342	306	373	7.40	73.7%	9.9%
6	40.2	8.26	0.739	23.51	20.67	280	249	306	5.79	70.1%	10.3%
5	34.3	6.63	0.695	24.4	19.67	218	194	240	4.29	64.7%	10.6%
4	29.1	5.23	0.647	25.72	18.7	158	143	175	2.95	56.5%	10.1%
3	24.6	4.03	0.59	27.28	17.69	103	93	112	1.82	45.2%	9.3%
2	21.8	3.2	0.529	28.21	16.7	60	53	68	1.00	31.3%	12.4%
1	19.2	2.07	0.387	38.07	15.67	22	22	22	0.34	16.7%	0.0%
0	13.4	1.05	0.283	31.75	14.68	0.5	0.5	0.5	0.00734	0.007%	0



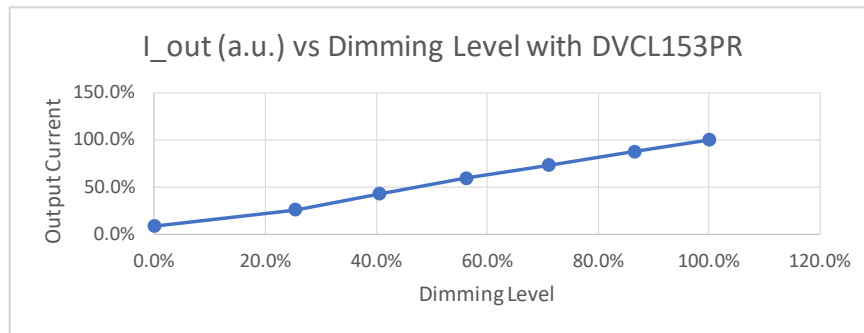


**12W DS12W-0000 120-277V UniDriver Series  
Constant Voltage**

**DIMMING CHARACTERISTICS (Continued)**

**CL Dimming (DVCL-153PR)**

Dim %	I <sub>in</sub> (mA)	P <sub>in</sub> (W)	PF	V <sub>out</sub> (V)	I <sub>out</sub> (mA)	IFP (min.)	IFP (max.)	P <sub>out</sub> (W)	Effi.	Flicker
100	139	15.76	0.946	24.19	507	438	572	12.26	77.8%	13.3%
85	138.7	13.64	0.826	23.18	442	363	504	10.25	75.1%	16.3%
70	128	11.2	0.738	22.06	371	298	429	8.18	73.1%	18.0%
55	116	8.86	0.643	20.92	299	236	353	6.26	70.6%	19.9%
40	101.3	6.39	0.533	19.6	217	172	261	4.25	66.6%	20.6%
25	81.3	4	0.416	18.16	131	106	158	2.38	59.5%	19.7%
0	52.9	1.67	0.273	16.18	43	34	50	0.70	41.7%	19.0%



**ELV Dimming (SELV-300P)**

Dim %	I <sub>in</sub> (mA)	P <sub>in</sub> (W)	PF	V <sub>out</sub> (V)	I <sub>out</sub> (mA)	IFP (min.)	IFP (max.)	P <sub>out</sub> (W)	Effi.	Flicker
100	141.7	15.98	0.939	24.19	507	436	576	12.26	76.7%	13.8%
85	138	13.65	0.824	13.17	443	378	525	5.83	42.7%	16.3%
70	126.3	11.28	0.744	22.11	374	323	451	8.27	73.3%	16.5%
55	113	8.78	0.647	20.9	297	248	367	6.21	70.7%	19.3%
40	97	6.29	0.54	19.58	215	177	269	4.21	66.9%	20.6%
25	77.5	4.03	0.433	18.18	132	106	170	2.40	59.5%	23.2%
10	46.3	1.64	0.294	16.03	36	30	44	0.58	35.2%	18.9%
0	41	1.37	0.277	15.7	25	21	31	0.39	28.6%	19.2%

