



ESS/ESST Series

ESS010	6-10 W
ESS015	11-15 W
ESS020	16-20 W
ESS030	21-30 W
ESST040	31-40 W

Tri-Mode Dimming™ (0-10 V & TRIAC/ELV) Constant Current LED Drivers with Fast Startup Time

Nominal Input Voltage	Max. Output Power	Output Voltage	Output Current	Efficiency	Max. Case Temperature	THD	Power Factor	Dimming Method	Dimming Range	Startup Time
120 to 277 Vac, 220 to 240 Vac	40 W	14 to 42 Vdc	250 to 2100 mA CC	up to 87% typical	90°C (measured at the hot spot)	< 20%	> 0.9	Forward-Phase, Reverse-Phase & 0 - 10V	1 - 100% (% of Iout)	300 ms typical

CC: Constant Current



ERP Part Number	Nominal Input Voltage (Vac)	Iout (mA)	Max Output Power (W)	Output Voltage Range (Vdc)	
				Min	Max
ESS010W: up to 10 W					
ESS010W-0180-42	120 to 277	180	7.6	28	42
ESS010W-0200-42	120 to 277	200	8.4	28	42
ESS010W-0250-42	120 to 277	250	10.5	28	42
ESS010W-0250-42-Z1 ⁽²⁾	120 to 277	250	10.5	28	42
ESS010W-0350-24	120 to 277	350	8.4	14	24
ESS010W-0500-12	120 to 277	500	6.0	6	12
ESS010W-0500-18	120 to 277	500	9.0	10	18
ESS010W-0750-12	120 to 277	750	9.0	6	12
ESS015W: 11 to 15 W					
ESS015W-0300-42	120 to 277	300	12.6	28	42
ESS015W-0350-32	120 to 277	350	11.2	21	32
ESS015W-0400-32	120 to 277	400	12.8	21	32
ESS015W-0350-42	120 to 277	350	14.7	28	42
ESS015W-0350-42-Z1 ⁽²⁾	120 to 277	350	14.7	28	42
ESS015W-0440-25	120 to 277	440	11.0	19	25
ESS015W-0440-34	120 to 277	440	15.0	24	34
ESS015W-0700-18	120 to 277	700	12.6	10	18
ESS015W-0700-18-Z1 ⁽²⁾	120 to 277	700	12.6	10	18
ESS015W-1000-12	120 to 277	1000	12.0	6	12
ESS015W-1050-14	120 to 277	1050	14.7	8	14
ESS015W-1050-14-Z1 ⁽²⁾	120 to 277	1050	14.7	8	14
ESS020W: 16 to 20 W					
ESS020W-0350-56	120 to 277	350	19.6	40	56
ESS020W-0400-42	120 to 277	400	16.8	28	42
ESS020W-0450-42	120 to 277	450	18.9	28	42
ESS020W-0500-32	120 to 277	500	16.0	21	32
ESS020W-0500-34	120 to 277	500	17.0	24	34
ESS020W-0600-27	120 to 277	600	16.2	20	27
ESS020W-0700-24	120 to 277	700	16.8	14	24
ESS020W-1400-14	120 to 277	1400	19.6	8	14
ESS020W-1400-14-Z1 ⁽²⁾	120 to 277	1400	19.6	8	14
ESS030W: 21 to 30 W					
ESS030W-0500-42	120 to 277	500	21.0	28	42
ESS030W-0500-42-Z1 ⁽²⁾	120 to 277	500	21.0	28	42
ESS030W-0550-42	120 to 277	550	23.1	28	42
ESS030W-0550-42-Y1 ⁽¹⁾	120 to 277	550	23.1	28	42
ESS030W-0620-42	120 to 277	620	26.0	28	42
ESS030W-0620-42-Z1 ⁽²⁾	120 to 277	620	26.0	28	42
ESS030W-0700-32	120 to 277	700	22.4	21	32
ESS030W-0700-42	120 to 277	700	29.4	28	42
ESS030W-0700-42-Z1 ⁽²⁾	120 to 277	700	29.4	28	42
ESS030W-0900-27	120 to 277	900	24.3	20	27
ESS030W-0900-32	120 to 277	900	28.8	21	32
ESS030W-1050-21	120 to 277	1050	22.1	14	21
ESS030W-1100-27	120 to 277	1100	29.7	20	27
ESS030W-1750-14	120 to 277	1750	24.5	8	14
ESS030W-1750-14-Z1 ⁽²⁾	120 to 277	1750	24.5	8	14
ESS030W-2100-14	120 to 277	2100	29.4	8	14
ESST040W: 31 to 40 W					
ESST040W-0800-42	120 to 277	800	33.6	28	42
ESST040W-0900-42	120 to 277	900	37.8	28	42
ESST040W-1400-24	120 to 277	1400	33.6	14	24
ESST040W-1400-27	120 to 277	1400	37.8	20	27
ESS010E: 11 to 10 W					
ESS010E-0250-42	220 to 240	250	10.5	28	42
ESS015E: 11 to 15 W					
ESS015E-0350-32	220 to 240	350	11.2	21	32
ESS015E-0350-42	220 to 240	350	14.7	28	42
ESS020E: 16 to 20 W					
ESS020E-0400-42	220 to 240	400	16.8	28	42
ESS020E-0450-42	220 to 240	450	18.9	28	42
ESS030E: 21 to 30 W					
ESS030E-0500-42	220 to 240	500	21.0	28	42
ESS030E-0620-42	220 to 240	620	26.0	28	42
ESS030E-0700-42	220 to 240	700	29.4	28	42
ESST040E: 31 to 40 W					
ESST040E-0800-42	220 to 240	800	33.6	28	42
ESST040E-0900-42	220 to 240	900	37.8	28	42

FEATURES

- Compatible with TRIAC (forward-phase or leading-edge), ELV (reverse-phase or trailing-edge) and 0-10 V dimmers
- ESSxxxW: TRIAC and ELV dimming only at 120 Vac.
- ESSxxxE: ELV dimming only at 230 Vac.
- Lifetime: 50,000 hours min at 70°C case temperature
- Protections: output open load, over-current and short-circuit (hiccup), and over-temperature with auto recovery
- Conducted and radiated EMI: Compliant with FCC CFR Title 47 Part 15 Class B (120 Vac)/Class A (277 Vac) and EN55015 (CISPR 15) at 220/230/240 Vac
- Complies with ENERGY STAR® luminaire specification and DLC (DesignLight Consortium®) technical requirements
- ESS series: IP64-rated case with silicone-based potting.
- ESST series: IP66-rated case with silicone-based potting.
- 90°C maximum case hot spot temperature
- Class 2 power supply

1) Non-linear 0-10V dimming profile: 10V to 9.1V=100%, 1.2V to 0.6V=1%, Dim to off <0.68V
 2) Non-linear 0-10V Dimming Profile: 10V to 9.1V=100%, 1V to 0.8V=1%, dim-to-off <0.8V

APPLICATIONS

- Downlights
- Commercial & Residential lighting
- Architectural lighting

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