

Power Supplies

Single Phase Power Supplies

5V, 12V

15-405W

100-240VAC

5V, 12V

15-405W



Output Voltage	5V		12V		12V									±12V
Output Current	3A	5A	1.3A	3.0A	4.2A	4.5A	4.5A	7.5A	10A	15A	16A	16A	30A	2.5A
Adjustment Range	5-5.5V	5-5.5V	12-15V	10-12V	12-15V	12-15V	12-15V	12-15V	12-15V	12-15V	12-15V	12-15V	12-15V	±12 or ±15V
Output Current	3.0A	5.0A	1.3-1.0A	3-2.5A	4.2-3.4A	4.5-3.6A	4.5-3.6A	7.5-6A	10-8A	15-13.5A	16-12.8A	16-12.8A	30/27A	2.5A ^{a)}
Output Power	15W	25W	15W	30W	50W	54W	54W	90W	120W	180W	192W	192W	360/405W	36W
Power Reserves	-	-	-	-	-	-	-	-	20%	50%	20%	20%	-	-
Ripple & Noise max. [mV _{pp}]	50mV	50mV	75mV	10mV	100mV	50mV	50mV	50mV	50mV	50mV	50mV	50mV	100mV	50mV
AC Input Voltage	100-240VAC Wide Range	100-240VAC Wide Range	100-240VAC Wide Range	100-240VAC Wide Range	100-240VAC Wide Range	100-240VAC Wide Range	100-240VAC Wide Range	100-120/ 200-240VAC	100-240VAC Wide Range	100-240VAC Wide Range	100-240VAC Wide Range	100-240VAC Wide Range	100-240VAC Wide Range	100-240VAC Wide Range
Active Power Factor Correction	-	-	-	-	-	-	-	-	Yes	Yes	Yes	Yes	Yes	-
Inrush Current (120/230VAC)	16A/31A	17A/35A	16A/31A	17A/35A	17A/35A	16A/32A	6A/6A	22A/37A	4A/3A	4A/7A	6A/9A	6A/9A	9A/7A	17A/35A
External Input Protection Recommendation (minimum)	B - 6A or C - 3A	B - 10A or C - 6A	B - 6A or C - 3A	B - 10A or C - 6A	B - 10A or C - 6A	B - 10A or C - 6A	B - 6A or C - 3A	B - 10A or C - 6A	B - 6A or C - 6A	B - 6A or C - 4A	B - 6A or C - 6A	B - 6A or C - 6A	B - 10A or C - 10A	B - 10A or C - 6A
DC Input Voltage	110-300VDC	110-300VDC	110-300VDC	110-300VDC	110-300VDC	110-300VDC	110-300VDC	290VDC	110-150VDC	110-150VDC	110-150VDC	110-300VDC	-	110-300VDC
Efficiency (Typical)	77.2%	80.0%	82.5%	84.0%	90.0%	87.2%	87.6%	88.5%	93.8%	91.8%	94.3%	94.3%	92.6%	86.0%
Power Losses (Typical)	4.5W	6.3W	3.1W	5.8W	6.0W	7.9W	7.6W	11.7W	7.9W	16.1W	11.6W	11.6W	28.8W	5.9W
Operating Temperature Range	-10°C to +70°C	-10°C to +70°C	-10°C to +70°C	-10°C to +70°C	-10°C to +70°C	-10°C to +70°C	-40°C to +70°C	-10°C to +70°C	-25°C to +70°C	-25°C to +70°C	-25°C to +70°C	-25°C to +70°C	-25°C to +70°C	-10°C to +70°C
Connection Terminals	Screw	Spring Clamp	Screw	Spring Clamp	Spring Clamp	Screw	Screw	Spring Clamp	Screw	Spring Clamp	Screw	Screw	Screw	Spring Clamp
Dimensions (WxHxD)	22.5x75x91mm	45x75x91mm	22.5x75x91mm	45x75x91mm	45x75x91mm	45x75x91mm	45x75x91mm	72.5x75x103mm	32x124x102mm	60x124x117mm	39x124x117mm	39x124x117mm	65x124x127mm	45x75x91mm
Weight	130g	240g	130g	250g	260g	250g	250g	360g	440g	900g	600g	600g	1000g	240g
DC-OK Relay Contact	-	-	-	-	-	-	-	-	Yes	Yes	Yes	Yes	Yes	-
Special Features	NEC Class 2	NEC Class 2	NEC Class 2	NEC Class 2 Low Output Noise	NEC Class 2	NEC Class 2	NEC Class 2 -40°C Specified				Shut Down Input	Extended DC Input		Dual Output Voltage
List Price (USD)	\$76.00	\$140.00	\$76.00	\$145.00	\$170.00	\$140.00	\$185.00	\$240.00	\$250.00	\$450.00	\$330.00	\$350.00	\$530.00	\$150.00
Product Family	MiniLine	MiniLine	MiniLine	MiniLine	MiniLine	MiniLine	MiniLine	MiniLine	DIMENSION	DIMENSION	DIMENSION	DIMENSION	DIMENSION	MiniLine
Catalog Number	ML15.051	ML30.101	ML15.121	ML30.102	ML50.102	ML60.121	ML60.122	ML100.102	CP5.121	QS10.121	CP10.121	CP10.122	CPS20.121	ML30.106

a) Both outputs can be loaded up to this output current as long as the output power is less than 36W. If the loads are different values, the lower output current should be at least 5% of the higher value.

100-240VAC

24V

15-120W



COMING															COMING
Output Voltage	24V						24V								
Output Current	0.63A	1.3A	1.3A	2.1A	2.5A	2.5A		3A	3.3A	3.4A	3.8A	3.9A	4.2A	5A	5A
Adjustment Range	24-28V	24-28V	24-28V	24-28V	24-28V	24-28V		24-28V	24-28V	24-28V	24V	24-28V	24-28V	24-28V	24-28V
Output Current	0.63-0.54A	1.3-1.1A	1.3-1.1A	2.1-1.8A	2.5-2.1A	2.5-2.1A		3-2.6A	3.3-2.7A	3.4-3A	3.8A	3.9-3.2A	4.2-3.6A	5-4.3A	5-4.3A
Output Power	15W	30W	30W	50W	60W	60W		72W	80W	80W	91.2W	95W	100W	120W	120W
Power Reserves	-	-	-	-	-	-		-	-	50%	-	-	-	20%	20%
Ripple & Noise max. [mV _{pp}]	50mV	50mV	50mV	50mV	50mV	50mV		50mV	50mV	50mV	50mV	50mV	50mV	50mV	50mV
AC Input Voltage	100-240VAC Wide Range	100-240VAC Wide Range	100-240VAC Wide Range	100-240VAC Wide Range	100-240VAC Wide Range	100-240VAC Wide Range		100-120/ 200-240VAC	100-240VAC Wide Range	100-240VAC Wide Range	100-240VAC Wide Range	100-120/ 200-240VAC	100-120/ 200-240VAC	100-240VAC Wide Range	100-240VAC Wide Range
Active Power Factor Correction	-	-	-	-	-	-		-	-	-	Yes	-	-	Yes	Yes
Inrush Current (120/230VAC)	16A/31A	17A/35A	18A/35A	17A/35A	16A/32A	6A/6A		26A/30A	23A/45A	5A/10A	9A/11A	22A/37A	22A/37A	4A/4A	4A/4A
External Input Protection Recommendation (minimum)	B - 6A or C - 3A	B - 10A or C - 6A	B - 6A or C - 3A	B - 10A or C - 6A	B - 10A or C - 6A	B - 6A or C - 3A		B - 10A or C - 6A	B - 10A or C - 6A	B - 6A or C - 6A	B - 6A or C - 3A	B - 10A or C - 6A	B - 10A or C - 6A	B - 6A or C - 6A	B - 6A or C - 6A
DC Input Voltage	110-300VDC	110-300VDC	110-300VDC	110-290VDC	110-300VDC	110-300VDC		290VDC	110-300VDC	110-300VDC	110-300VDC	290VDC	290VDC	110-150VDC	110-150VDC
Efficiency (Typical)	85.1%	87.5%	89.4%	89.0%	89.7%	90.4%		89.0%	89.8%	90.0%	92.0%	90.0%	90.0%	94.3%	94.3%
Power Losses (Typical)	2.7W	4.3W	3.7W	6.2W	6.7W	6.4W		8.7W	9.1W	9.1W	7.9W	10.5W	11.4W	7.3W	7.3W
Operating Temperature Range	-10°C to +70°C	-10°C to +70°C	-10°C to +70°C	-10°C to +70°C	-10°C to +70°C	-40°C to +70°C		-10°C to +70°C	-25°C to +70°C	-25°C to +70°C	-25°C to +70°C	-25°C to +70°C	-10°C to +70°C	-10°C to +70°C	-25°C to +70°C
Connection Terminals	Screw	Spring Clamp	Screw	Spring Clamp	Screw	Screw		Spring Clamp	Screw	Spring Clamp	Spring Clamp	Spring Clamp	Spring Clamp	Screw	Spring Clamp
Dimensions (WxHxD)	22.5x75x91mm	45x75x91mm	22.5x75x91mm	45x75x91mm	45x75x91mm	45x75x91mm		45x75x91mm	32x124x102mm	32x124x102mm	40x124x117mm	72.5x75x103mm	72.5x75x103mm	32x124x102mm	32x124x102mm
Weight	130g	230g	140g	240g	250g	250g		260g	430g	440g	620g	360g	360g	440g	440g
DC-OK Relay Contact	-	-	-	Triac	-	-		-	-	-	Yes	-	-	Yes	Yes
Special Features	NEC Class 2	NEC Class 2	NEC Class 2	NEC Class 2	NEC Class 2	NEC Class 2 -40°C Specified		NEC Class 2	NEC Class 2		NEC Class 2	NEC Class 2			
List Price (USD)	\$70.00	\$110.00	\$95.00	\$130.00	\$110.00	\$175.00		\$160.00	\$160.00	\$210.00	\$350.00	\$225.00	\$180.00	\$210.00	\$250.00
Product Family	MiniLine	MiniLine	MiniLine	MiniLine	MiniLine	MiniLine		MiniLine	DIMENSION	DIMENSION	DIMENSION	MiniLine	MiniLine	DIMENSION	DIMENSION
Catalog Number	ML15.241	ML30.100	ML30.241	ML50.100 ML50.109 a)	ML60.241	ML60.242		ML70.100	CS3.241	QS3.241	QS5.DNET	ML95.100	ML100.100 ML100.109 a)	CP5.241	CP5.241-S1

a) Conformal coated & different list price

Power Supplies

Single Phase

Single Phase Power Supplies

24V

120-240W

100-240VAC

24V

120-240W



Output Voltage	24V													
Output Current	5A	5A	5A	5A	5A	10A	10A	10A	10A	10A	10A	10A	10A	10A
Adjustment Range	24-28V	24-28V	24-28V	24-28V	24-28V	24-28V	24-28V	24-28V	24-28V	24-28V	24-28V	24-28V	24-28V	24-28V
Output Current	5-4.3A	5-4.3A	5-4.3A	5-4.5A	5-4.5A	10-8.6A	10-8.6A	10-8.6A	10-8.6A	10-8.6A	10.0-8.6A	10-9A	10-9A	10-9A
Output Power	120W	120W	120W	120W	120W	240W	240W	240W	240W	240W	240W	240W	240W	240W
Power Reserves	20%	20%	-	50%	50%	20%	20%	20%	20%	20%	-	50%	50%	50%
Ripple & Noise max. [mV _{pp}]	50mV	50mV	100mV	50mV	50mV	50mV	50mV	50mV	50mV	50mV	100mV	50mV	50mV	50mV
AC Input Voltage	100-120/ 200-240VAC	100-120/ 200-240VAC	100-120/ 200-240VAC	100-240VAC Wide Range	100-240VAC Wide Range	100-240VAC Wide Range	100-240VAC Wide Range	100-240VAC Wide Range	100-120/ 200-240VAC	100-120/ 200-240VAC	100-240VAC Wide Range	100-240VAC Wide Range	100-240VAC Wide Range	100-240VAC Wide Range
Active Power Factor Correction	-	-	-	Yes	Yes	Yes	Yes	Yes	-	-	Yes	Yes	Yes	Yes
Inrush Current (120/230VAC)	3A/3A	3A/3A	22A/33A	9A/11A	9A/11A	6A/9A	6A/9A	6A/9A	3A/3A	3A/3A	14A/26A	4A/7A	4A/7A	4A/7A
External Input Protection Recommendation (minimum)	B - 10A or C - 6A	B - 10A or C - 6A	B - 10A or C - 6A	B - 6A or C - 3A	B - 6A or C - 3A	B - 6A or C - 6A	B - 6A or C - 6A	B - 6A or C - 6A	B - 10A or C - 6A	B - 10A or C - 6A	B - 10A or C - 6A	B - 6A or C - 4A	B - 6A or C - 4A	B - 6A or C - 4A
DC Input Voltage	-	-	-	110-300VDC	110-300VDC	110-150VDC	110-150VDC	110-300VDC	-	-	-	110-150VDC	110-150VDC	110-300VDC
Efficiency (Typical)	90.2%	90.2%	92.3%	92.7%	92.7%	95.2%	95.2%	95.2%	91.6%	91.6%	95.2%	93.5%	93.5%	93.5%
Power Losses (Typical)	13.2W	13.2W	10.0W	9.4W	9.4W	12.1W	12.1W	12.1W	22.0W	22.0W	12.1W	16.7W	16.7W	16.7W
Operating Temperature Range	-25°C to +70°C	-25°C to +70°C	-10°C to +70°C	-25°C to +70°C	-25°C to +70°C	-25°C to +70°C	-25°C to +70°C	-25°C to +70°C	-25°C to +70°C	-25°C to +70°C	-25°C to +70°C	-25°C to +70°C	-25°C to +70°C	-25°C to +70°C
Connection Terminals	Screw	Spring Clamp	Screw	Spring Clamp	Spring Clamp	Screw	Spring Clamp	Screw	Screw	Spring Clamp	Screw	Spring Clamp	Spring Clamp	Spring Clamp
Dimensions (WxHxD)	32x124x117mm	32x124x117mm	39x124x124mm	40x124x117mm	40x124x117mm	39x124x117mm	39x124x117mm	39x124x117mm	60x124x117mm	60x124x117mm	49x124x124mm	60x124x117mm	60x124x117mm	60x124x117mm
Weight	500g	500g	370g	620g	620g	600g	600g	600g	700g	700g	540g	900g	900g	900g
DC-OK Relay Contact	-	-	Yes	Yes	Yes	Yes	Yes	Yes	-	-	Yes	Yes	Yes	Yes
Special Features	ATEX/IECEX							Extended DC Input	ATEX/IECEX					
List Price (USD)	\$210.00	\$250.00	\$150.00	\$295.00	\$475.00	\$280.00	\$310.00	\$310.00	\$285.00	\$325.00	\$225.00	\$400.00	\$610.00	\$430.00
Product Family	DIMENSION	DIMENSION	PIANO	DIMENSION	DIMENSION	DIMENSION	DIMENSION	DIMENSION	DIMENSION	DIMENSION	PIANO	DIMENSION	DIMENSION	DIMENSION
Catalog Number	CS5.241 CS5.241-C1 a)	CS5.241-S1	PIC120.241D	QS5.241	QS5.241-A1	CP10.241 CP10.241-C1 a)	CP10.241-S1	CP10.242	CS10.241	CS10.241-S1	PIC240.241D	QS10.241 QS10.241-C1 a)	QS10.241-A1	QS10.241-D1

a) Conformal coated & different list price

Power Supplies

Single Phase Power Supplies
24V, 30V, 36V240-960W

100-240VAC

24V, 30V, 36V240-960W



	NEW		NEW		COMING								
Output Voltage	24V						24V		30V	36V			
Output Current	20A	20A	20A	20A	20A	20A	40A		8A	6.7A	13.3A	13.3A	26.7A
Adjustment Range	24-28V	24-28V	24-28V	24-28V	24-28V	24-28V	24-28V		28-32V	36-42V	36-42V	36-42V	36-42V
Output Current	20-17.1A	20-17.1A	20-17.1A	20-17.1A	20-17A	20-17A	40-34.3A		8.6-7.5A	6.7-5.7A	13.3-11.4A	13.3-11.4A	26.7-22.9A
Output Power	480W	480W	480W	480W	480W	480W	960W		240W	240W	480W	480W	960W
Power Reserves	20%	20%	20%	-	50%	50%	50%		50%	20%	20%	50%	50%
Ripple & Noise max. [mV _{pp}]	50mV	50mV	50mV	100mV	100mV	100mV	100mV		50mV	50mV	100mV	100mV	130mV
AC Input Voltage	100-240VAC Wide Range	100-240VAC Wide Range	100-240VAC Wide Range	100-240VAC Wide Range	100-240VAC Wide Range	100-240VAC Wide Range	100-240VAC Wide Range		100-240VAC Wide Range	100-240VAC Wide Range	100-240VAC Wide Range	100-240VAC Wide Range	100-240VAC Wide Range
Active Power Factor Correction	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes
Inrush Current (120/230VAC)	10A/4.5A	10A/4.5A	9A/7A	14A/26A	9A/7A	9A/7A	17A/11A		4A/7A	6A/9A	9A/7A	9A/7A	17A/11
External Input Protection Recommendation (minimum)	B - 10A or C - 10A	B - 10A or C - 10A	B - 10A or C - 10A	B - 10A or C - 6A	B - 10A or C - 10A	B - 10A or C - 10A	B - 15A or C - 15A		B - 6A or C - 4A	B - 6A or C - 6A	B - 10A or C - 10A	B - 10A or C - 10A	B - 15A or C - 15A
DC Input Voltage	110-150VDC	110-150VDC	-	-	110-150VDC	110-150VDC	-		110-150VDC	110-150VDC	-	110-150VDC	-
Efficiency (Typical)	95.6%	95.6%	94.0%	95%	93.9%	93.9%	94.6%		93.5%	95.4%	94.3%	94.0%	94.6%
Power Losses (Typical)	22.1W	22.1W	30.6W	25.3W	31.4W	31.4W	54.8W		16.7W	11.6W	29.0W	30.6W	54.8W
Operating Temperature Range	-25°C to +70°C	-25°C to +70°C	-25°C to +70°C	-25°C to +70°C	-25°C to +70°C	-25°C to +70°C	-25°C to +70°C		-25°C to +70°C	-25°C to +70°C	-25°C to +70°C	-25°C to +70°C	-25°C to +70°C
Connection Terminals	Screw	Spring Clamp	Screw	Screw	Spring Clamp	Spring Clamp	Screw		Spring Clamp	Screw	Screw	Spring Clamp	Screw
Dimensions (WxHxD)	48x124x127mm	48x124x127mm	65x124x127mm	59x124x127mm	82x124x127mm	82x124x127mm	125x124x117mm		60x124x117mm	39x124x117mm	65x124x127mm	82x124x127mm	125x124x127mm
Weight	830g	830g	1000g	810g	1200g	1200g	1900g		900g	600g	1000g	1200g	1900g
DC-OK Relay Contact	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes
Special Features							ATEX/IECEX	Shut Down Input		Shut Down Input			
List Price (USD)	\$430.00	\$450.00	\$450.00	\$300.00	\$550.00	\$890.00	\$875.00		\$475.00	\$330.00	\$525.00	\$730.00	\$1,100.00
Product Family	DIMENSION	DIMENSION	DIMENSION	PIANO	DIMENSION	DIMENSION	DIMENSION		DIMENSION	DIMENSION	DIMENSION	DIMENSION	DIMENSION
Catalog Number	CP20.241 CP20.241-C1 a) CP20.241-V1 b)	CP20.241-S1	CPS20.241 CPS20.241-C1 a)	PIC480.241D	QS20.241 QS20.241-C1 a)	QS20.241-A1	QS40.241		QS10.301	CP10.361	CPS20.361	QS20.361	QS40.361

a) Conformal coated & different list price
b) With Shut Down Input & different list price

Power Supplies

Single Phase

Single Phase Power Supplies

48V

50-960W

100-240VAC

48V

50-960W



COMING

Output Voltage	48V		48V							
Output Current	1.05A	2.1A	5A	5A	5A	5.4A	10A	10A	10A	20A
Adjustment Range	48-56V	48-56V	48-52V	48-56V	48-56V	48-56V	48-56V	48-56V	48-55V	48-54V
Output Current	1.05-0.9A	2.1-1.8A	5-4.6A	5-4.3A	5-4.3A	5.4-4.6A	10-8.6A	10-8.6A	10-8.7A	20-17.8A
Output Power	50W	100W	240W	240W	240W	259W	480W	480W	480W	960W
Power Reserves	-	-	20%	50%	50%	20%	20%	20%	50%	50%
Ripple & Noise max. [mV _{pp}]	200mV	50mV	100mV	100mV	100mV	50mV	50mV	50mV	100mV	150mV
AC Input Voltage	100-240VAC Wide Range	100-120/ 200-240VAC	100-120/ 200-240VAC	100-240VAC Wide Range	100-240VAC Wide Range	100-240VAC Wide Range	100-240VAC Wide Range	100-240VAC Wide Range	100-240VAC Wide Range	100-240VAC Wide Range
Active Power Factor Correction	-	-	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Inrush Current (120/230VAC)	17A/35A	22A/37A	3A/3A	4A/7A	4A/7A	6A/9A	10A/4.5A	9A/7A	9A/7A	17A/11A
External Input Recommendation (minimum)	B - 10A or C - 6A	B - 10A or C - 6A	B - 10A or C - 6A	B - 6A or C - 4A	B - 6A or C - 4A	B - 6A or C - 6A	B - 10A or C - 10A	B - 10A or C - 10A	B - 10A or C - 10A	B - 15A or C - 15A
DC Input Voltage	110-300VDC	290VDC	-	110-150VDC	110-300VDC	110-150VDC	110-150VDC	-	110-150VDC	-
Efficiency (Typical)	90.0%	91.0%	91.6%	92.0%	92.0%	95.5%	96.0%	93.9%	94.3%	95.0%
Power Losses (Typical)	6.0W	10.0W	22.0W	20.9W	20.9W	12.3W	20.0W	31.2W	29.0W	50.5W
Operating Temperature Range	-10°C to +70°C	-10°C to +70°C	-25°C to +70°C	-25°C to +70°C	-25°C to +70°C	-25°C to +70°C	-25°C to +70°C	-25°C to +70°C	-25°C to +70°C	-25°C to +70°C
Connection Terminalss	Spring Clamp	Spring Clamp	Screw	Spring Clamp	Spring Clamp	Screw	Screw	Screw	Spring Clamp	Screw
Dimensions (WxHxD)	45x75x91mm	72.5x75x103mm	60x124x117mm	60x124x117mm	60x124x117mm	39x124x117mm	48x124x127mm	65x124x127mm	82x124x127mm	125x124x127mm
Weight	240g	360g	700g	900g	900g	600g	820g	1000g	1200g	1900g
DC-OK Relay Contact	-	-	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Special Features	Extended DC Input					Shut Down Input				
List Price (USD)	\$155.00	\$230.00	\$360.00	\$540.00	\$570.00	\$325.00	\$460.00	\$525.00	\$610.00	\$1,010.00
Product Family	MiniLine	MiniLine	DIMENSION	DIMENSION	DIMENSION	DIMENSION	DIMENSION	DIMENSION	DIMENSION	DIMENSION
Catalog Number	ML50.105	ML100.105	CS10.481	QS10.481	QS10.481-D1	CP10.481	CP20.481	CPS20.481	QS20.481	QS40.481

Power Supplies

3-Phase Power Supplies
12V, 24V
36V, 48V, 72V
90-960W
240-960W

380-480VAC

12V, 24V
36V, 48V, 72V
90-960W
240-960W



Output Voltage	12V	24V							36V			48V				72V
Output Current	8A	3.75A	4.2A	5A	10A	20A	40A	40A	13.3A	26.6A	26.7A	5A	10A	20A	20A	13.3A
Adjustment Range	12-15V	24-28V	24-28V	24-28V	24-28V	24-28V	24-28V	24V	36-42V	36V	36-42V	48-56V	48-55V	48-54V	48V	72V
Output Current	8-6.4A	3.75-3.2A	4.2-3.6A	5-4.3A	10-8.6A	20-17.5A	40-34.3A	40A	13.3-11.4A	26.6A	26.7-22.9A	5-4.3A	10A	20-17.8A	20A	13.3A
Output Power	96W	90W	100W	120W	240W	480W	960W	960W	480W	960W	960W	240W	480W	960W	960W	960W
Power Reserves	-	-	-	20%	20%	50%	50%	25%	50%	25%	50%	20%	50%	50%	25%	25%
Ripple & Noise max. [mV _{pp}]	100mV	50mV	50mV	50mV	50mV	100mV	100mV	1500mV	100mV	2000mV	130mV	100mV	100mV	150mV	2500mV	3000mV
AC Input Voltage	380-480VAC Wide range	380-480VAC Wide Range	380-480VAC Wide Range	380-480VAC Wide Range	380-480VAC Wide Range	380-480VAC Wide Range	380-480VAC Wide Range	480VAC ^{c)} 400VAC ^{d)}	380-480VAC Wide Range	480VAC ^{c)} 400VAC ^{d)}	380-480VAC Wide Range	380-480VAC Wide Range	380-480VAC Wide Range	380-480VAC Wide Range	480VAC ^{c)} 400VAC ^{d)}	480VAC ^{c)} 400VAC ^{d)}
Active Power Factor Correction	-	-	-	-	-	Yes	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes	Yes	Yes
Inrush Current (380/480VAC)	4A/4A	36A/45A	36A/45A	4A/4A	4A/4A	3A/3A	4.5A/4.5A	2A/2A	3A/3A	2A/2A	4.5A/4.5A	4A/4A	3A/3A	4.5A/4.5A	2A/2A	2A/2A
External Input Protection Recommendation	B - 6A or C - 3A	B - 10A or C - 6A	B - 10A or C - 6A	B - 6A or C - 3A	B - 6A or C - 3A	B - 6A or C - 3A	B - 6A or C - 6A	B - 6A or C - 3A	B - 6A or C - 3A	B - 6A or C - 3A	B - 6A or C - 6A	B - 6A or C - 3A	B - 6A or C - 3A	B - 6A or C - 6A	B - 6A or C - 3A	B - 6A or C - 3A
Efficiency (Typical)	85.8%	89.5%	89.5%	90.4%	92.8%	95.0%	95.3%	95.5%	94.8%	95.5%	95.3%	92.8%	95.4%	95.4%	96.0%	95.5%
Power Losses (Typical)	15.9W	10.5W	11.7W	12.7W	18.6W	25.3W	47.3W	45.2W	26.3W	45.2W	47.3W	18.6W	23.1W	46.3W	40.0W	45.2W
Operating Temperature Range	-25°C to +70°C	-10°C to +70°C	-10°C to +70°C	-25°C to +70°C	-25°C to +70°C	-25°C to +70°C	-25°C to +70°C	-25°C to +70°C	-25°C to +70°C	-25°C to +70°C	-25°C to +70°C	-25°C to +70°C	-25°C to +70°C	-25°C to +70°C	-25°C to +70°C	-25°C to +70°C
Connection Terminals	Screw	Spring Clamp	Spring Clamp	Screw	Screw	Spring Clamp	Screw	Screw	Spring Clamp	Screw	Screw	Screw	Spring Clamp	Screw	Screw	Screw
Dimensions (WxHxD)	40x124x117mm	72.5x75x103mm	72.5x75x103mm	40x124x117mm	62x124x117mm	65x124x127mm	110x124x127mm	96x124x159mm	65x124x127mm	96x124x159mm	110x124x127mm	62x124x117mm	65x124x127mm	110x124x127mm	96x124x159mm	96x124x159mm
Weight	500g	360g	360g	500g	750g	870g	1500g	1400g	870g	1400g	1500g	750g	870g	1500g	1400g	1400g
DC-OK Relay Contact	-	-	-	-	-	Yes	Yes	-	Yes	-	Yes	-	Yes	Yes	-	-
Special Features		NEC Class 2					Shut Down Input	For Power Applications		For Power Applications	Shut Down Input			Shut Down Input	For Power Applications	For Power Applications
List Price (USD)	\$330.00	\$250.00	\$250.00	\$300.00	\$355.00	\$560.00	\$750.00	\$640.00	\$750.00	\$700.00	\$940.00	\$440.00	\$630.00	\$900.00	\$640.00	\$740.00
Product Family	DIMENSION	MiniLine	MiniLine	DIMENSION	DIMENSION	DIMENSION	DIMENSION	DIMENSION	DIMENSION	DIMENSION	DIMENSION	DIMENSION	DIMENSION	DIMENSION	DIMENSION	DIMENSION
Catalog Number	CT5.121 ^{e)}	ML90.200 ^{e)}	ML100.200 ^{e)}	CT5.241 ^{e)}	CT10.241 CT10.241-C1 ^{a)}	QT20.241 QT20.241-C1 ^{a)}	QT40.241 QT40.242 ^{b)}	XT40.242 ^{c)} XT40.241 ^{d)}	QT20.361	XT40.362 ^{c)} XT40.361 ^{d)}	QT40.361	CT10.481	QT20.481	QT40.481	XT40.482 ^{c)} XT40.481 ^{d)}	XT40.722 ^{c)} XT40.721 ^{d)}

a) Conformal coated & different list price
b) With enhanced lifetime & different price
c) Use XT40.242, XT40.362, XT40.482, XT40.722 for 480VAC mains
d) Use XT40.241, XT40.361, XT40.481, XT40.721 for 380-400VAC mains
e) Utilizes 2 legs of a 3-Phase system

AC & DC Input

Many AC/DC Power Supplies are equipped with a UL approved DC input voltage range.

Input: 110-150VDC 180-480W

Output Voltage	Output Current	Catalog Number	Page	Special Features	
12-15V	10A	CP5.121	16		
	15A	QS10.121	16		
	16A	CP10.121	16	Shut Down Input	
24-24.5V	8A	QS10.DNET	28	DeviceNet Approved	
24-28V	5A	CP5.241	18		
		CP5.241-S1	18	Spring Clamp Terminals	
	10A	CP10.241	19		
		CP10.241-C1	19	Conformal Coating	
		CP10.241-S1	19	Spring Clamp Terminals	
		QS10.241	20		
		QS10.241-A1	20	Conformal Coating, ATEX	
		QS10.241-C1	20	Conformal Coating	
		20A	CP20.241	21	
			CP20.241-C1	21	Conformal Coating
	CP20.241-S1		21	Spring Clamp Terminals	
	CP20.241-V1		21	Shut Down Input	
28-32V	8A	QS20.241	21		
		QS20.241-A1	22	Conformal Coating, ATEX	
		QS20.241-C1	21	Conformal Coating	
36-42V	6.7A	CP10.361	22		
	13.3A	QS20.361	22		
48-56V	5A	QS10.481	23		
	5.4A	CP10.481	24		
	10A	CP20.481	24		
48-55V	10A	QS20.481	24		

Input: 110-290VDC 50W

Output Voltage	Output Current	Catalog Number	Page	Special Features
24-28V	2.1A	ML50.100	17	NEC Class 2
		ML50.109	17	Conformal Coating

Input: 290VDC 72-100W

Output Voltage	Output Current	Catalog Number	Page	Special Features
12-15V	7.5A	ML100.102	16	
24-28V	3A	ML70.100	18	NEC Class 2
	3.9A	ML95.100	18	NEC Class 2
	4.2A	ML100.100	18	
		ML100.109	18	Conformal Coating
48-56V	2.1A	ML100.105	23	

Input: 110-300VDC 15-240W

Output Voltage	Output Current	Catalog Number	Page	Special Features
5-5.5V	3A	ML15.051	15	NEC Class 2
	5A	ML30.101	15	NEC Class 2
10-12V	3A	ML30.102	15	Low Output Noise
+/-12 or +/-15V	2.5A	ML30.106	16	NEC Class 2, Dual Output
12-15V	1.3A	ML15.121	15	NEC Class 2
	4.2A	ML50.102	15	NEC Class 2
	4.5A	ML60.121	15	NEC Class 2
		ML60.122	16	NEC Class 2, -40°C Specified
	16A	CP10.122	16	
24-28V	0.63A	ML15.241	17	NEC Class 2
	1.3A	ML30.100	17	NEC Class 2
		ML30.241	17	NEC Class 2
	2.5A	ML60.241	17	NEC Class 2
		ML60.242	17	NEC Class 2, -40°C Specified
	3.3A	CS3.241	18	NEC Class 2
	3.4A	QS3.241	18	
	3.95A	QS5.DNET	28	DeviceNet Approved
		QS5.241	19	
		QS5.241-A1	19	Conformal Coating, ATEX
48-56V	10A	CP10.242	19	
		QS10.241-D1	20	
	1.05A	ML50.105	23	NEC Class 2
	5A	QS10.481-D1	23	

Network Power Supplies

AS-Interface® field bus systems are network technologies where power and data are provided by the same wire. Therefore, special power supplies with a tightly regulated output voltage, high immunity to transients and power surges as well as low electromagnetic emissions are required to prevent signal error and meet the specific bus network requirements.

DeviceNet® is a network protocol used in the automation industry to interconnect control devices for data exchange. The DeviceNet® supplies are designed based on four key elements: The size of the DeviceNet® cables, charging the capacitors in a very short period of time, ramping the output voltage according to the DeviceNet® timing specifications and limiting the output current to protect the network.

All PULS network power supplies are tested and approved under strict requirements by the governing agencies ODVA for DeviceNet® and AS-International Association for AS-Interface®.



QS10.DNET

SLA4.100

Output	24V		30.5V				
Output Current	3.8A	8A	2.8A	4A	8A	8A	4A
Output Voltage	24V	24-24.5V	30.5V	30.5V	30.5V	30.5V	30.5V
Ripple & Noise max. [mV _{pp}]	50mV	50mV	100mV	150mV	100mV	100mV	100mV
AC Input Voltage	100-240VAC Wide Range	100-240VAC Wide Range	100-120/ 200-240VAC	100-120/ 200-240VAC	100-120/ 200-240VAC	380-480VAC	-
Active Power Factor Correction	Yes	Yes	-	-	-	-	-
DC Input Voltage	110-300VDC	110-150VDC	-	-	-	-	-
Efficiency (Typical)	92.0%	93.4%	90.5%	90.0%	92.0%	91.5%	90.5%
Power Losses (Typical)	7.9W	13.6W	9.1W	13.5W	21.2W	22.5W	12.7W
Operating Temperature Range	-25°C to +70°C	-25°C to +70°C	-10°C to +70°C	-10°C to +70°C	-10°C to +70°C	-10°C to +70°C	-25°C to +70°C
Connection Terminals	Spring Clamp	Spring Clamp	Screw	Screw	Screw	Screw	Screw
Dimensions (WxHxD)	40x124x117mm	60x124x117mm	49x124x102mm	73x124x102mm	91x124x102mm	129x124x117mm	40x124x102mm
Weight	620g	900g	500g	650g	890g	1160g	500g
Bus Network	DeviceNet®	DeviceNet®	AS-Interface®	AS-Interface®	AS-Interface®	AS-Interface®	AS-Interface®
Special Features	NEC Class 2		NEC Class 2	Ground-Fault Detector			DC/DC Converter
List Price (USD)	\$350.00	\$495.00	\$520.00	\$590.00	\$820.00	\$1,200.00	\$725.00
Product Family	DIMENSION	DIMENSION	SilverLine	SilverLine	SilverLine	SilverLine	SilverLine
Catalog Number	QS5.DNET	QS10.DNET	SLA3.100	SLA4.100	SLA8.100	SLA8.300	SLAD4.100