

PowerPorts™ Capacity Information Note

The number of LED video fixtures that can be driven by a single output of a PowerPort is subject to the following limits:

	P3 PowerPort 1500	P3 PowerPort 1000 IP
Pixels per output	1024	1024
Power per output	48 V / 7.5 A	48 V / 5.0 A
Fixtures per output	63	63

	DMX PowerPort 375 (240V input)	DMX PowerPort 375 (120V input)	Martin IP66 PSU 240W
DMX channels per output	512	512	512
Power per output	48 V / 7.5 A	48 V / 5.0 A	48 V / 5.0 A
Fixtures per output	N/A	N/A	N/A

This means that the following numbers of products can be driven by one single output of a PowerPort:

Product	P3 PowerPort 1500	P3 PowerPort 1000 IP	DMX PowerPort 375 (240V input)	DMX PowerPort 375 (120V input) Martin IP66 PSU 240W
VC-Grid 8x8 60	12	8	12	8
VC-Grid 4x4 60	45	30	45	30
VC-Grid 8x8 30	12	8	12	8
VC-Grid 8x8 25	12	8	12	8
VC-Grid 16x16 15	4	4	6	4

VC-Strip 8x1 60	63	60	90	60
VC-Strip 4x1 60	63	63	180	120
VC-Strip 16x1 30	45	30	45	30
VC-Strip 8x1 30	63	60	90	60
VC-Strip 16x1 25	45	30	45	30
VC-Strip 8x1 25	63	60	90	60
VC-Strip 32x1 15	32	30	45	30
VC-Strip 16x1 15	63	60	90	60
VDO Sceptron 40 1000mm	40	27	40	27
VDO Sceptron 40 320mm	63	63	124	86
VDO Sceptron 20 1000mm	20	14	20	14
VDO Sceptron 20 320mm	62	43	62	43
VDO Sceptron 10 1000mm	10	7	10	7
VDO Sceptron 10 320mm	31	21	31	21
VDO Fatron 20 1000mm	5	3	5	3
VDO Fatron 20 320mm	15	10	15	10
VDO Dotron	60	40	60	40
Exterior PixLine 40 1280mm	31	21	31	21
Exterior PixLine 40 320mm	63	63	124	86
Exterior PixLine 20 1280mm	15	10	15	10
Exterior PixLine 20 320mm	62	43	62	43
Exterior PixLine 10 1280mm	7	5	7	5
Exterior PixLine 10 320mm	31	21	31	21

Exterior Dot-HP	60	40	60	40
VC-Dot 1 Pixels	300	200	300	200
VC-Dot 4 Pixels	192	128	192	128
VC-Dot 9 Pixels	108	72	108	72

Table above is based on 50 m total length from PowerPort to the last fixture in the chain (incl. length of the fixtures themselves). Some fixtures support extended range (longer maximum cable-length between PowerPort and last fixture in the chain) with less fixtures per output. Please see corresponding product user manual for more information.

When mixing different fixture types on an output of a PowerPort, it is easier to use below table which indicates the percentage of maximum load each single fixture represents:

Product	P3 PowerPort 1500	P3 PowerPort 1000 IP	DMX PowerPort 375 (240V input)	DMX PowerPort 375 (120V input) Martin IP66 PSU 240W
VC-Grid 8x8 60	8.33 %	12.50 %	8.33 %	12.50 %
VC-Grid 4x4 60	2.22 %	3.33 %	2.22 %	3.33 %
VC-Grid 8x8 30	8.33 %	12.50 %	8.33 %	12.50 %
VC-Grid 8x8 25	8.33 %	12.50 %	8.33 %	12.50 %
VC-Grid 16x16 15	25.00 %	25.00 %	16.66 %	25.00 %
VC-Strip 8x1 60	1.58 %	1.66 %	1.11 %	1.66 %
VC-Strip 4x1 60	1.58 %	1.58 %	0.55 %	0.83 %
VC-Strip 16x1 30	2.22 %	3.33 %	2.22 %	3.33 %
VC-Strip 8x1 30	1.58 %	1.66 %	1.11 %	1.66 %
VC-Strip 16x1 25	2.22 %	3.33 %	2.22 %	3.33 %
VC-Strip 8x1 25	1.58 %	1.66 %	1.11 %	1.66 %
VC-Strip 32x1 15	3.12 %	3.33 %	2.22 %	3.33 %

VC-Strip 16x1 15	1.58 %	1.66 %	1.11 %	1.66 %
VDO Sceptron 40 1000mm	2.50 %	3.70 %	2.50 %	3.70 %
VDO Sceptron 40 320mm	1.58 %	1.58 %	0.80 %	1.16 %
VDO Sceptron 20 1000mm	5.00 %	7.14 %	5.00 %	7.14 %
VDO Sceptron 20 320mm	1.61 %	2.32%	1.61 %	2.32%
VDO Sceptron 10 1000mm	10.00 %	14.28 %	10.00 %	14.28 %
VDO Sceptron 10 320mm	3.22 %	4.76 %	3.22 %	4.76 %
VDO Fatron 20 1000mm	20.00 %	33.33 %	20.00 %	33.33 %
VDO Fatron 20 320mm	6.66 %	10.00 %	6.66 %	10.00 %
VDO Dotron	1.66 %	2.50 %	1.66 %	2.50 %
Exterior PixLine 40 1280mm	3.22 %	4.76 %	3.22 %	4.76 %
Exterior PixLine 40 320mm	1.58 %	1.58 %	0.80 %	1.16 %
Exterior PixLine 20 1280mm	6.66 %	10.00 %	6.66 %	10.00 %
Exterior PixLine 20 320mm	1.61 %	2.32%	1.61 %	2.32%
Exterior PixLine 10 1280mm	14.28 %	20.00 %	14.28 %	20.00 %
Exterior PixLine 10 320mm	3.22 %	4.76 %	3.22 %	4.76 %
Exterior Dot-HP	1.66 %	2.50 %	1.66 %	2.50 %
VC-Dot 1 Pixel	0.33 %	0.50 %	0.33 %	0.50 %
VC-Dot 4 Pixel	0.52 %	0.78 %	0.52 %	0.78 %
VC-Dot 9 Pixel	0.92 %	1.38 %	0.92 %	1.38 %

Let's take this combination of fixtures on an output of a P3 PowerPort 1500 as example:

- 6x VDO Sceptron 10 1000mm = 6 x 10.00%
- 1x VDO Fatron 20 1000mm = 1 x 20.00%
- 3x VDO Fatron 20 320mm = 3x 6,66%

= below 100% (this combination of fixtures can be connected safely to an output of a P3 PowerPort 1500)