

All modules are Doepfer A100 Eurorack System compatible with PTC fuse and diode protected 10 pin shrouded power connector (airtenuator is not a module, requires no power and is compatible with all mono-3.5mm cables)

Specs	VCAs/Distortion			Utilities	Sequencing			Logic			Filters		Special	
Dimensions	2xVCX	3xVCA	Optodist	Ampmix	Penta	VC Seq	trig xpnd	(N)OR	X(N)OR	(N)AND	Paths	Aperture	Altered States	Airtenuator
Height:	3U (128.5mm)	3U (128.5mm)	3U (128.5mm)	3U (128.5mm)	3U (128.5mm)	3U (128.5mm)	3U (128.5mm)	3U (128.5mm)	3U (128.5mm)	3U (128.5mm)	3U (128.5mm)	3U (128.5mm)	3U (128.5mm)	Length: 58mm
Width:	8HP (40.30mm)	4HP (20mm)	4HP (20mm)	6HP (30mm)	8HP (40.30mm)	4HP (20mm)	10HP (50.50mm)	4HP (20mm)	4HP (20mm)	4HP (20mm)	8HP (40.30mm)	8HP (40.30mm)	20HP (101.30mm)	Width: 16mm
Depth:	40mm (with power cable attached)	51mm (with power cable attached)	31mm (with power cable attached)	35mm (with power cable attached)	39mm (with power cable attached)	42mm (with power cable attached)	45mm (with cable attached)	45mm (with cable attached)	50mm (with cable attached)	45mm (with cable attached)	46mm (with cable attached)	27mm (with cable attached)	45mm (with cable attached)	Floating
Weight:	125g (approx w/cable)	35g (approx w/cable)	50g (approx w/cable)	110g (approx w/cable)	40g (approx w/cable)	125g (approx w/cable)	35g (approx w/cable)	35g (approx w/cable)	35g (approx w/cable)	35g (approx w/cable)	110g (approx w/cable)	125g (approx w/cable)	365g (approx w/cable)	7g (approx)
<b>Current consumption</b>														
+12V rail:	34mA	26mA	min 13mA to max 16mA	22mA	6mA	22mA	12mA	28mA @ 10V input signal	28mA @ 10V input signal	28mA @ 10V input signal	30 mA	Min 35mA to max 50mA	112mA	0.2mA
-12V rail:	32mA	21mA	min 13mA to max 16mA	22mA	1mA	11mA	0mA	0mA	0mA	0mA	8mA	Min 45mA to max 75mA	106mA	0mA
+5V rail:	no +5V supply required	no +5V supply required	no +5V supply required	no +5V supply required	no +5V supply required	no +5V supply required	no +5V supply required	no +5V supply required	no +5V supply required	no +5V supply required	no +5V supply required	no +5V supply required	no +5V supply required	no +5V supply required
			(There are small power variations between different vactrol and LED varieties. The option requiring least power is SR3 optocoupler paired with green limiter LEDs).					(14mA @ 5V input signal)	(14mA @ 5V input signal)	(14mA @ 5V input signal)		(Minimum with no self oscillation, maximum with self oscillation at high pitch)		@ 10V signal +/-20% from the output jack
<b>Basic specifications</b>														
total frequency controllable range:	DC to 50+kHz	DC to 50+kHz	DC to 50+kHz	DC to 50+kHz	DC to 100?+kHz	DC to 100+kHz	DC to 100+kHz	?	?	?	DC to 50+kHz	DC to 50+kHz	DC to 50+kHz	DC to 50+kHz
max input/output signal:	20Vpp	20Vpp	20Vpp	20Vpp	n/a	0 to +10V in/-5V to +5V out	0 to +10V	20Vpp	20Vpp	20Vpp	20Vpp	10Vpp	20Vpp	20Vpp
CV input range:	0 to +10V	(calibrate to preference) 0V to +10Vmax	(calibrate to preference) 0V to +10V max	n/a	0 to +10V	0 to +10V	n/a	n/a	n/a	n/a	-10V to +10V	-10V to +10V	-10V to +10V	-10V to +10V
max gain:	1.0x	When calibrated to 1.00x gain (0dB) at 5.00V CV 8.00V CV will give a 1.65x gain (4.35dB)	calibrated as VCA 0dB gain @ +8V CV -40dB gain @ 0V CV	max 16x gain (24dB) 2.0x (6dB) x 4 chan	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Nominal impedances</b>														
Audio/Signal input:	100k ohm	100k ohm	100k ohm	22k ohm	100k ohm	100k ohm	n/a	100k ohm	100k ohm	100k ohm	430 ohm	100k ohm	100k ohm	50k +/-20%
Audio/Signal output:	1k ohm	1k ohm	1k ohm	in loop compensated	in loop compensated	in loop compensated	1k ohm	1k ohm	1k ohm	1k ohm	430 ohm	1k ohm	1k ohm	(variable impedance if used backwards)
CV input:	100k ohm	100k ohm	100k ohm	n/a	n/a	n/a	n/a	n/a	n/a	n/a	22k ohm	100k ohm	200k ohm	