

Data Sheet

High voltage supplies of the device class ZP001



Technical data

Device class

Table 1: Technical data, device class

Device class ZP001		
Output voltage V _{nom} [kV]	±1	
Output current I _{nom} [mA]	3	
Ripple and noise (f >10 Hz) [mV]	20	
Internal capacitor C _O [nF]	750	
Damping resistor [MΩ]	0.1	
Discharge resistor R _{DIS} [MΩ]	55	
HV connector	SHV	
Polarity	Output 1 : positive, Output 2: negative	
Stability V _{out} in Voltage control	$\Delta V_{in}: \Delta v < 0.05\% * V_{nom}$. $\Delta R (0 \leq I_{OUT} \leq I_{nom}) : \Delta v < 0.1\%$	
Accuracy	Voltage: < 1% * V _{nom} for one year	
Temperature coefficient	< 1 * 10 ⁻⁴ /K	
Supply and control connector	H15, male	
Remote control (AIO)	V _{SET}	$0 \leq V_{SET} \leq 5 V \Rightarrow$ Output 1 : $0 \leq V_{OUT1} \leq V_{NOM1} \pm 1\%$ Output 2 : $0 \geq V_{OUT2} \geq V_{NOM2} \pm 1\%$ Attention! Output voltage is internally not limited! At $V_{SET} > 5 V \Rightarrow V_{OUT} > V_{NOM} $ is available. Do not use V_{SET} > 5 V!
	INHIBIT	Low level 0 V – 1 V \Rightarrow HV = 0 High level 3.5 V – 5 V or open \Rightarrow HV according V _{SET}
	V _{MON}	$0 \leq V_{OUT1} \leq V_{NOM1} \pm 1\% \Rightarrow 0 \leq V_{MON1} \leq 5 V$ $0 \geq V_{OUT2} \geq V_{NOM2} \pm 1\% \Rightarrow 0 \leq V_{MON2} \leq 5 V$
Supply	20 VDC $\leq V_{in} \leq$ 26 VDC / I _{in} \leq 0.5 A	
Cooling	Free convection, consider mounting orientation.	
Dimension	3U cassette with 4 HP, 160 mm depth	
Weight	0.35kg	
Working conditions	Temperature: 0°C to 40 °C Humidity: 20% to 90%, no condensation	
Storage conditions	-20°C to 60°C	

Dimensions

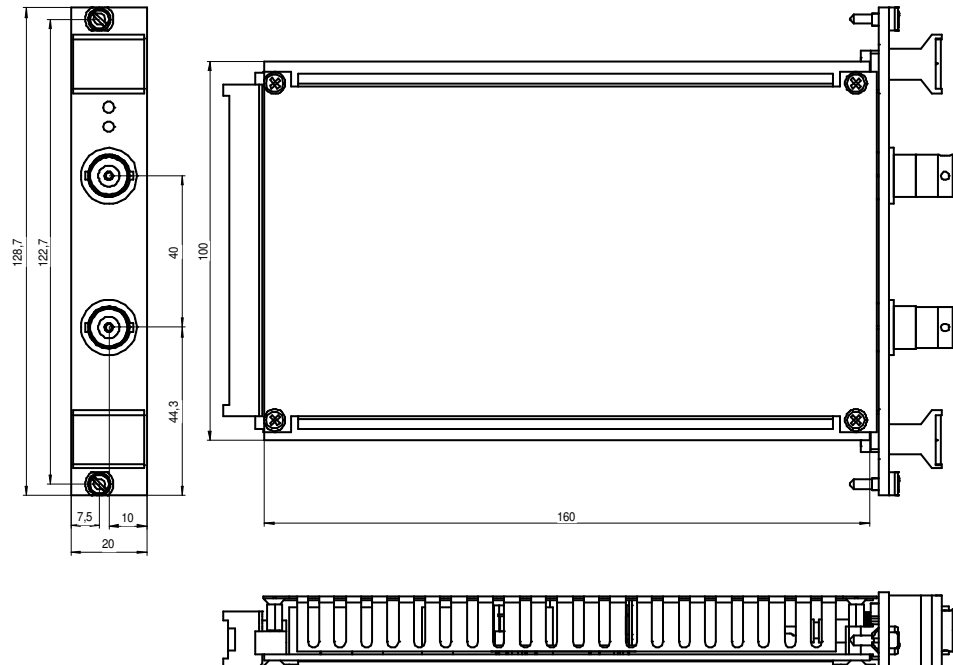


Figure 2: Dimensioned drawing (in mm)

Supply and control connector

Table2: Pin assignment male H15 connector

Supply and control connector, male H15 connector			
Pin	Name	Description	
Pin 4	n.c.		
Pin 6	GND		
Pin 8	n.c.		
Pin 10	GND		
Pin 12	n.c.		
Pin 14	V _{MON2}	Monitor output voltage 2	$V_{out2} = 0 \text{ to } V_{nom2} \Rightarrow V_{MON2} = 0 \text{ to } 5 \text{ V}$
Pin 16	n.c.		
Pin 18	+24V	Supply voltage	$20 \text{ VDC} \leq V_{in} \leq 26 \text{ VDC} / I_{in} \leq 0.5 \text{ A}$
Pin 20	V _{SET}	Set value output voltage	$V_{SET_V} = 0 \text{ to } 5 \text{ V}^{1)} \Rightarrow V_{out} = 0 \text{ to } V_{nom}$
Pin 22	n.c.		
Pin 24	V _{MON1}	Monitor output voltage 1	$V_{out1} = 0 \text{ to } V_{nom1} \Rightarrow V_{MON1} = 0 \text{ to } 5 \text{ V}$
Pin 26	+24V	Supply voltage	connected with Pin 18
Pin 28	n.c.		
Pin 30	n.c.		
Pin 32	INH	HV inhibited / enabled	Level low, activ 0 V – 1 V high, inactiv 3.5 V – 5 V or open