



# Hilberling

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## HPA32-500/2

### HF Power Amplifier

31 ... 33 MHz





Project: HF Power Amplifier

Technical Data

Data applies to each of the two power modules PA/A u. PA/B

#### Performance Data

- Frequency Range	32 ±1 MHz
- Input Power	-10 dBm
- Output Power	2 kW in pulse mode (25% duty cycle) 500 Watt -0.5 dB / +1 dB in CW mode
- RF Monitor Output	-60 dBc
- Load Impedance VSWR	max. 3:1
- Harmonic Filter	34 MHz
- Spurious Response	< -60 dBc typ.
- System Impedance	50 Ohm
- Operating Mode	AB-linear

#### RF Connectors

- RF Input	Connector type:	SMA female
- RF Output	Connector type:	N female
- RF Monitor	Connector type:	SMA female

#### Power Supply

- Supply Voltage	+50 V DC / 45 A (2 x 22.5 A)	
	Connector type:	CliffCon FCR2068

#### Control Inputs

- PA Enable ON / OFF	GND = ON / OPEN = OFF	
- CW / Pulse	GND = CW / OPEN = Pulse	
- HF VOX	GND = ON / OPEN = OFF	
	Connector type:	D-Sub DE-9 female



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Technical Data

#### Status LEDs

- Operation (Power)	LED green
- HF ON	LED green
- SWR Overload	LED red
- Temperature Overload	LED red

#### Status Signals

- SWR	5V OK / 0V NOT OK
- HF ON	5V OK / 0V NOT OK
- Temperature	5V OK / 0V NOT OK

#### Temperature Range

- Operation	0 ... +40°C
- Storage	0 ... +70°C

#### Cooling

- Air Cooling	active by Fans
- Air Entrance	Front Panel
- Air Outlet	Rear Panel

#### Housing

- Material	Sheet Steel / Front Panel Aluminum
- Dimensions	19" / 3 HU / Depth 460 mm
- Weight	22.3 kg



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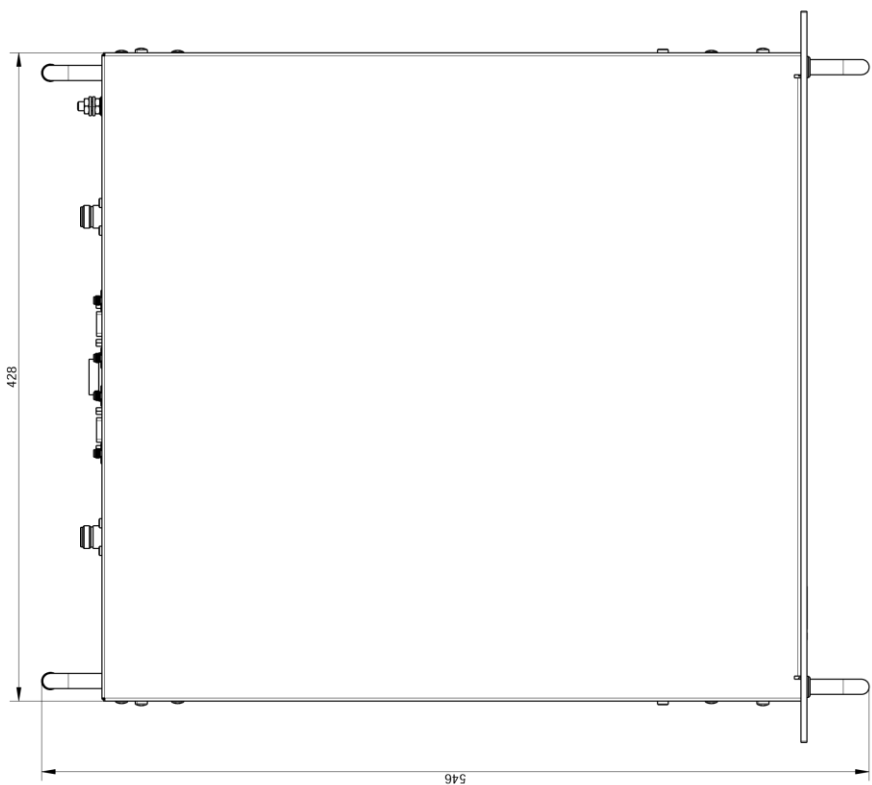
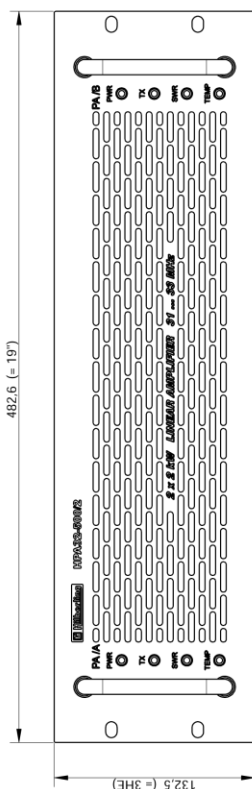
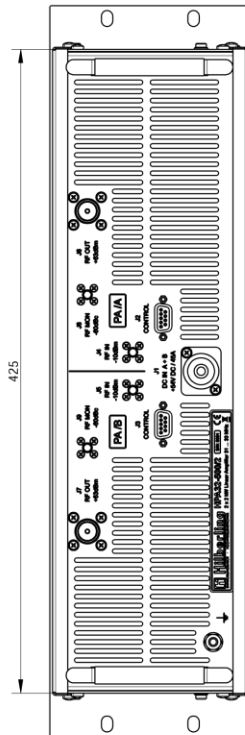
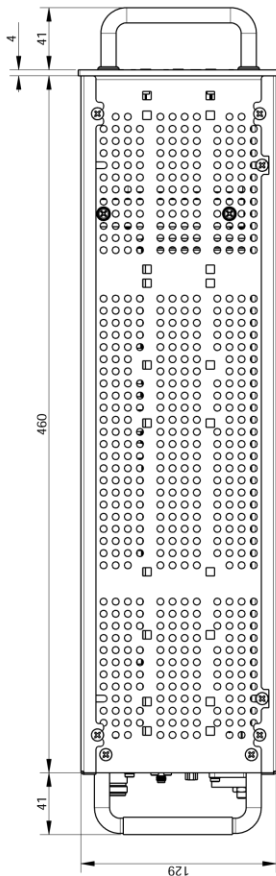
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## Data Sheet / Specification

### HPA32-500/2

### Project: HF Power Amplifier

### Outline Drawings





#### J2 CONTROL , J3 CONTROL / D-Sub DE-9

PIN	Name	Level	Description
1	GND	GND	-
2	PA Enable	ON = 0V (GND) OFF = OPEN	Input Activates the PA
3	SWR Overload	Error = 0V (GND) OK = 5V	Output SWR Monitoring
4	HF-ON	Error = 0V (GND) OK = 5V	Output PA active
5	GND	GND	-
6	CW / Pulse	CW = 0V (GND) Pulse = OPEN	Input Switching PEP- / CW- Mode
7	HF-VOX	ON = 0V (GND) OFF = OPEN	Input Activates HF VOX
8	TEMP Overload	Error = 0V (GND) OK = 5V	Output Temperature Monitoring
9	Operation	Error = 0V (GND) OK = 5V	Output Voltage Monitoring

#### HF-VOX

When HF-VOX is activated (J2 or J3, Pin 7) PA Enable will be activated if HF input level (at J4 or J5) is  $\geq -30$  dBm, independent from Signal at J2 or J3, Pin 2.