

### APPLICATIONS

- > Actuators position control
- > Active control of vibrations
- > Embedded solutions

### KEY FEATURES

- > All-in-one piezo-driver and controller
- > 2 channels, with push-pull capability
- > PID control with stabilizing filters, tunable with GUI
- > Integrated SG conditioner or external sensor option
- > Low noise SNR 85 dB and THD 0.1%

### RELATED PRODUCT

- > Piezo-actuators
- > Piezo-mechanisms



### SPECIFICATIONS

PARAMETER	TYPICAL VALUE	UNIT
<b>&gt; General</b>		
Function	All-in-one piezo-driver and controller	
Number of control channels	2	
Integrated sensor conditioning	Strain Gages	
Digital communication	RS422	
Graphical User Interface	CTEC HDPM	
<b>&gt; Digital control</b>		
Control strategy	Tunable PID + Stabilizing filters	
Stabilising filters	Tunable lowpass and notch	
List of stabilising filters configurations	No filter 2nd order lowpass filter 2nd order notch filter 2 × 2nd order notch filters 4th order notch filter	
Sampling rate	20	kSps
Digital resolution	16	bits
<b>&gt; Analog inputs</b>		
Number of analog inputs	2	
Analog inputs Voltage range	-10 ... +10	V
Small signals bandwidth (-3 dB)	34	kHz

### > Strain gages (SG) conditioner

Number of channels	2	
Reference output voltage	5	Vdc
Maximum reference output current	30	mA
Typical bridge impedance	350	Ohm
Output voltage range	-10 ... +10	V
Output impedance	20k	Ohm
Real gain	546.45	V/V
Small signals bandwidth (-3 dB)	34	kHz

### > Piezo driver

Number of channels	2	
Push-pull rail nominal voltage	130	V
Nominal output voltage range	-20 ... +150	V
Max output current	0.2	A
Permanent output current <sup>(1)</sup>	0.035	Arms
Ideal gain	20	V/V
Small signals bandwidth (-6 dB)	32	kHz

### > Protections

Overtemperature		
Overload		
Missing connector		

### > Power supply

Recommended supply voltage	+28	Vdc
Supply voltage range	+24 ... +28	Vdc
Supply current <sup>(2)</sup>	0.2 ... 1	Arms
Power consumption	5 ... 28	W

## MISCELLANEOUS

PARAMETER	TYPICAL VALUE	UNIT
Mass	0.25	kg
Dimensions	91 × 80 × 35.5	mm
Cooling	Natural convection + Heat-sinking surface	
Maximum dissipated power	28	W
Operating temperature range <sup>(4)</sup>	-40 ... +70	°C
Storage temperature range	-40 ... +85	°C
Warm up time	15	min

### > Interfaces

Main connector	HARWIN M80-5 102042	
Mechanism connector	HARWIN M80-5 101642	

### > Included accessories

HDP45 Graphical User Interface	Windows compatibility	
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## OPTIONS

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- > **External sensor option** <sup>(5)</sup>
- > **Input voltage range** **-10 ... +10 V**

## ANNOTATIONS

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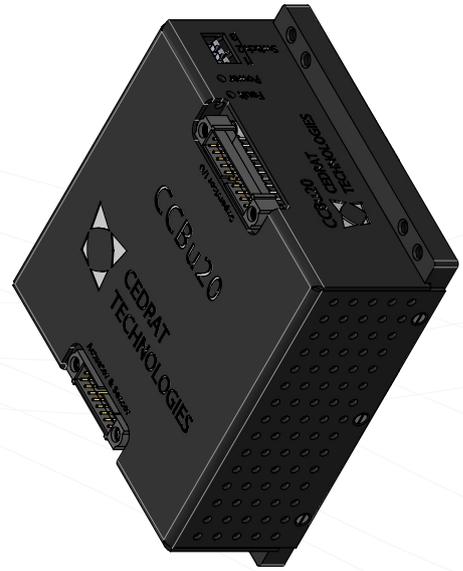
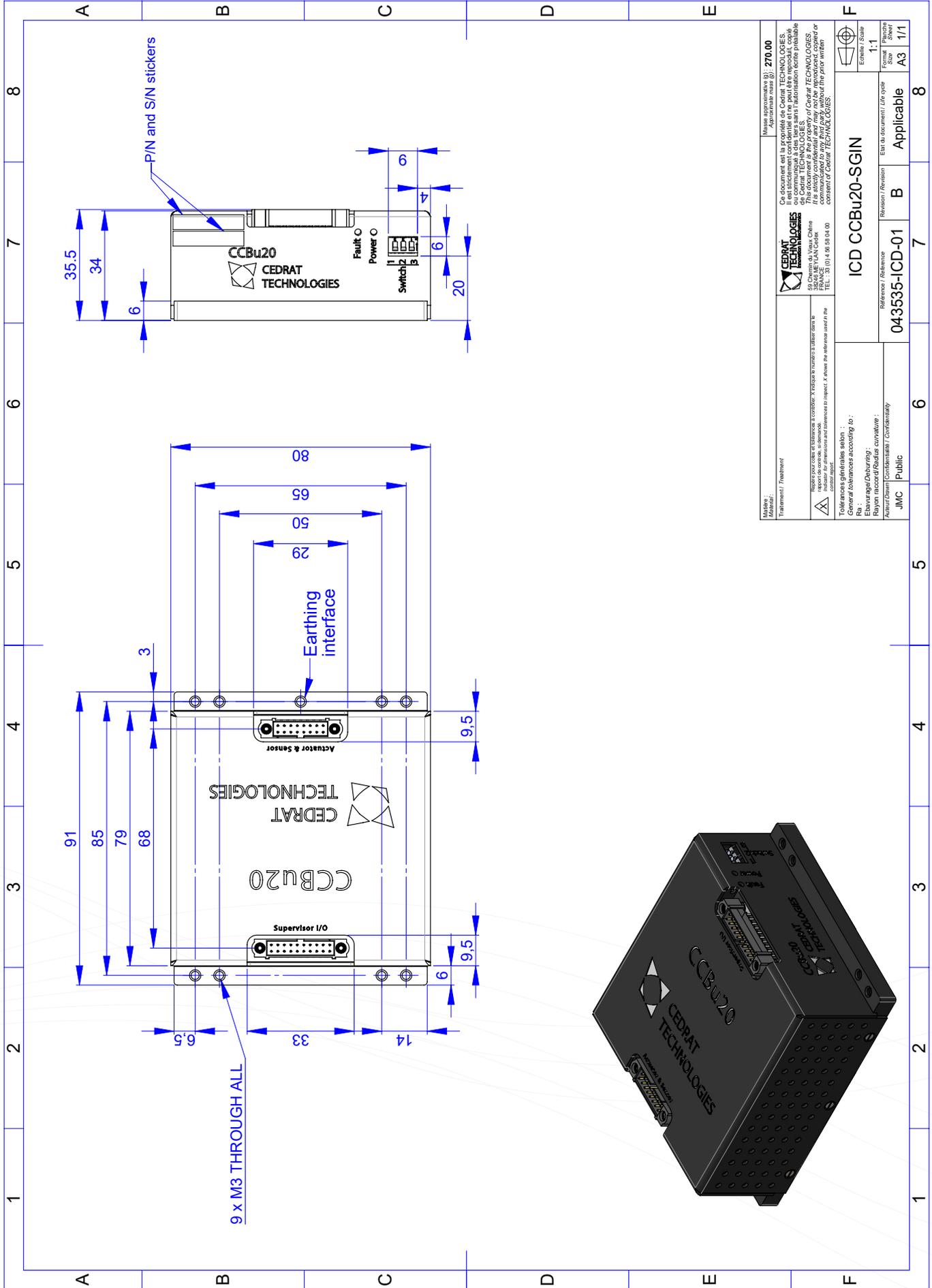
*(1) At +28 Vdc supply. Lower output current has to be considered for lower supply voltages*

*(2) At recommended supply voltage*

*(4) Additional heatsink might be required*

*(5) Applies to both channels*

*Replaces the integrated SG conditioner*



Motif : Matériau : Traitement / Treatment :	Masse approximative (g) : <b>270.00</b> Approximate mass (g) :
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