CTEC released its new range of Switching Amplifier SA75X boards rack mounted for driving low voltage Piezo Actuators in dynamic condition. The driver board rack mounted comes in 3 models A, B & D aiming at providing a large amount of continuous output current respectively from 5, 10 and 20 Amps under 150 V max voltage. The A, B and D models are delivered inside a RK84F-4H rack with a max number of channels respectively of 2, 2 and 1 (see figure 1 showing the SA75D).

The main advantage of the SA75X is to expand the working bandwidth of low voltage piezo ceramic based preloaded actuators. For instance, the SA75D can drive 2 APA1000XL in parallel (220 uF capacitance) at full 1 mm stroke up to 170 Hz. The standard configuration is rack mounted for use in laboratory but CTEC can develop OEM board version under specifications for embedded applications.

These COMPACT, DYNAMIC & PRECISE SA75X piezo drivers are adapted to air & space applications (as well many other applications) when driving large piezo actuators with low volume & low power consumption is required. Another advantage of the SA75X is its high power-to-mass ratio and its very high efficiency. The output reactive power is 10 times larger the input power. This is due to its switching topology and its intrinsic energy recovery.

**REFERENCES UNIT** | **SA75A** | **SA75B** | **SA75D**
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Item Code | V-SA75A | V-SA75B | V-SA75D
Notes | Preliminary data | Preliminary data | Preliminary data
Max. number of channels | 2 | 2 | 1
Main voltage | VDC | 0 / 240 | 0 / 240 | 0 / 240
Output voltage | V | -20 / 150 | -20 / 150 | -20 / 150
Min Output voltage | V | -20 | -20 | -20
Max Output voltage | V | 150 | 150 | 150
Voltage Gain | V/V | 20 | 20 | 20
Max average current | A | 5 | 10 | 20
Max average power | VA | 320 | 630 | 1370
Output load capacitance | µF | 400 | 400 | 400
Control input voltage | V | -1 ... 7.5 | -1 ... 7.5 | -1 ... 7.5
Min input voltage | V | -1 | -1 | -1
Max input voltage | V | 7.5 | 7.5 | 7.5
Ripple current | % | 8 | 8 | 8
Total Harmonic distortion | % | 2 | 2 | 2
Signal / Noise ratio | dB | 60 | 60 | 60
Loaded output bandwidth | Hz | 130 | 260 | 520
Unloaded output bandwidth | Hz | 1500 | 1500 | 1500

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