TENSOR SERIES

TENSOR 18

16-input, 18-output car DSP amplifier

The TENSOR 18 is WONDOM's flagship 16-input, 18-output car DSP amplifier for multi-way and multi-zone systems. Built around the Analog Devices ADAU1452 with 16 × 60 W at 4 ohm, it reaches 105 dB SNR and 0.002% THD+N, the highest performance in the range.

DSP IN / OUT	POWER @ 4 OHM	POWER @ 2 OHM	SNR
16 / 18	16 × 60 W	16 × 100 W	105 dB

DSP AND PROCESSING

DSP inputs / outputs	16 / 18
DSP processor	Analog Devices ADAU1452
ADC	ES7210 × 4
DAC	PCM1681 × 2 (8-channel) + PCM1754 × 1 (2-channel)
Audio resolution	24-bit
Max sampling rate	192 kHz
PC tuning	Supports 18 channels
Equaliser	31-band
Audio decoding	MP3 / FLAC / WAV / WMA / APE

INPUTS AND OUTPUTS

Inputs	USB 3.0, high-level input, Optical, Coaxial
High-level input	16-channel
AUX input	2-channel
Optical / coaxial	Optical and coaxial, 192 kHz decoding
USB flash drive	Supported
Bluetooth	Bluetooth 6.0 (JL7031C8 (Dual Core))
High-level output	16-channel
RCA output	18-channel

AMPLIFIER

Amplifier	CSC3601 × 8
Amplifier class	Class D
Output power @ 4 ohm	16 × 60 W
Output power @ 2 ohm	16 × 100 W
Power notes	960 W stated total; 4 ohm
Load impedance	2 ohm / 4 ohm
Output note	OUT 1–16 run on the built-in channels; OUT 17–18 are signal outputs for an external amplifier.

AUDIO PERFORMANCE

Signal-to-noise ratio	105 dB (typ.)
THD+N	0.002% (typ.)
Dynamic range	> 102 dB
Channel separation	> 90 dB
Frequency response	20 Hz – 36 kHz
Signal input range	0.05 – 10 Vrms

POWER, ENVIRONMENT AND SIZE

Operating voltage	10 – 16 V
Standby current	< 1 mA
Standby power	< 0.1 W
Operating temperature	-40 °C to 80 °C
Dimensions	282 × 200 × 53 mm
W-ILM load management	Integrated across model range