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Title:Experimental research on 0.14 THz super high speed wireless communication system

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Abstract:This paper introduces main modules of 0.14 THz super high speed wireless communication experimental system and experimental results. The THz research group of Institute of Electronic Engineering of China Academy of Engineering Physics, from the view point of THz electronics, based on the THz semiconductor devices and wide band digital modulation and demodulation technologies, utilizing the technologies of "low frequency band hyper-speed vector modulation + sub-harmonic mixer + amplifier", successfully achieves 0.14 THz 0.5 km 10 Gb/s high speed transmission afterwards by means of soft demodulation, realizes 4 channel high-definition video signal real-time transmission and demodulation for the first time in China.

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