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High-power optical amplifier with enhanced wall-plug efficiency for 10- channel WDM satellite laser communication systems

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An important aspect of optical satellite communication technology is the power consumption of the laser systems. We present a high-efficiency all-fiber amplifier for a WDM communication system. 10 channels combined in a polarization-
maintaining fiber can be efficiently amplified up to a total power level of 100W in the 1 μm wavelength-range.

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