

DC Voltages

For the downlink or transmit path, the DC voltage into the PA is $+27\text{VDC}\pm 1\text{VDC}$. The current consumption of the PA is typically 6.5 amperes at full power (43dBm/20W at the output antenna port). The PA has RF transistors that are class AB devices which pull current depending on the RF output power. The PA consumes 2 amperes typical with no RF output power. The driver amplifier (WBA) is supplied with $6.8\text{VDC}\pm 0.5\text{VDC}$. The WBA current consumption is constant with respect to output power as the RF devices are class A. The typical WBA current is 850mA.