

UHF OEM Modules

1 Power Consumption

Module Type	Idle	Full TX	Peak current
M800	115 mA	330 mA @ +20 dBm	–
M900	115 mA	705 mA @ +27 dBm	–
M950	115 mA	1330 mA @ +30 dBm	2 A

The measured power consumption are less than the estimated one both in idle and in TX. In TX consider that the RF is not continuously on due to RF channel switch and pause times defined by ETSI standard.

In continuous mode: RF ON/OFF is sufficient for low power applications, the alive time is about 15 ms / 20 ms.

With continuous mode off you can use the inventory command and in this case RF ON/OFF commands are not needed.

Operation Mode	How to
Continuous mode ON (+ spontaneous mode ON)	Use RF Deactivation/Activation command
Continuous mode OFF (Idle)	Use Inventory or Data Request command

2 Measures

RF Power	M950	M900	M800
0 dBm	210 mA	150 mA	Tbd
+3 dBm	250 mA	150 mA	Tbd
+6 dBm	230 mA	150 mA	Tbd
+9 dBm	230 mA	150 mA	Tbd
+12 dBm	250 mA	150 mA	Tbd
+15 dBm	300 mA	160 mA	Tbd
+18 dBm	330 mA	330 mA	Tbd
+21 dBm	400 mA	400 mA	Tbd
+24 dBm	520 mA	450 mA	Tbd
+27 dBm	700 mA	520 mA	Tbd
+30 dBm	900 mA	–	Tbd
RF Off (cont. + spont.)	100 mA	90 mA	Tbd
Idle	85 mA	70 mA	tbd

When operating RF the power consumption is not a steady current but short pulses. This is due to the regulations. So these average values have an error margin of -20 % / +60 %.