

Duty Cycle Calculations for 5800RP transmitted messages (Manchester Encoded)

Message type, Transmission Time, and Duty Cycle (per 100 ms):

58xx (ASIC) 272 uS 6 data bytes + 2 repeater bytes + 16 bit preamble = 80 bits
80 bits * 272 uS = 21.76 mS (21.76 mS/100 mS) * 50% = 10.88%

5800TM 272 uS 7 data bytes + 2 repeater bytes + 16 bit preamble = 88 bits
88 bits * 272 uS = 23.94 mS (23.94 mS/100 mS) * 50% = 11.97%

500%P PWM (keylog) 23 preamble bits * 90uS * 50% = 1.04 mS, plus,
(66 data bits + 2 repeater bytes = 82 bits * 66.67%) = 14.76ms = (15.8mS/100mS) = 15.8%

5839 (Es656) 272 uS 12 data bytes + 2 repeater bytes + 16 bit preamble = 136 bits
128 bits * 272 uS = 34.82 mS (34.82 mS/100 mS) * 50% = 17.41%

5800TM2 272 uS 13 data bytes + 2 repeater bytes + 16 bit preamble = 136 bits
136 bits * 272 uS = 36.99 mS (36.99 mS/100 mS) * 50% = 18.5%

5883 (Es657) 100 uS 53 data bytes + 2 repeater bytes + 16 bit preamble = 456 bits
456 bits * 100 uS = 45.6 mS (45.6 mS/100 mS) * 50% = 22.8%