GLENAYRE™

Wireless Access Group

2101 Tasman Drive
Santa Clara, CA 95054 USA
tel 408-653-1555
fax 408-567-1069

Description of the Duty Cycle for the AccessLinkII 2-way pager

The duty cycle of the AccessLinkII is based on the protocol. The frame time is 1.875 sec as defined by the protocol. At the slowest transmit data rate defined by the protocol (800bps), the transmit pulse duration is 160msec. Therefore, the maximum duty cycle is 0.0853. The 160 msec transmit pulse duration is the duration of an acknowledgement pulse when a message is received. In order to obtain the maximum duty cycle, a message would have to be received in every frame. For this to happen, messages would have to be sent continuously to the device, the network would have to have little traffic, and the device would have to be operated at its minimum duty cycle. The protocol allows the duty cycle to be adjusted and today is run at 8 times this minimum meaning that the actual maximum duty cycle in operation today is actually 1/8 of the value given above. Given the probability of all of these incidences occurring at the same time, it is nearly impossible that this maximum duty cycle would ever be achieved in practice.