Duty Cycle

Radio protocol cSP-L · https://faqdoc.info/en/systemauswahl/alpha-smartware-en/radio-protocol-csp-l-en/whats-a-duty-cycle-and-what-does-it-do/

What’s a duty cycle and what does it do?

The duty cycle is a legally regulated limitation of the transmission time of devices in the 868 MHz range. The purpose of the duty cycle is to ensure that all subscribers have enough time to transmit their data on this non-exclusive frequency.

Regarding the 868 Mhz frequency range we use, the maximum transmission time of each device is 1% of an hour (so 36 seconds in an hour). Once they’ve reached the 1% limit, the devices can no longer transmit until this time limit has passed. The duty cycle is not usually reached under normal circumstances. However, this might occur in exceptional cases during commissioning or initial installation of a system due to increased and training processes that require a lot of bandwidth. After a short period of time (1 hour max.) the device will work again.

In the case of the 869.525 Mhz frequency, the specified duty cycle is 10%.