Wired White

LoRa and LoRaWAN Introduction

What is LoRa?

"**LoRa**" means **Long Range** refers to a physical layer (PHY) with a modulation type

developed and patented by Cycleo (part of Semtech since 2012).

Features :

▶ Low power consumption, ideal for IOT

▶ Transmit small data over distances up to 15 km

▶ Chirp Spread Spectrum (CSS) modulation originally developed in 1940 for Radar application

▶ Correlation mechanism based on band spreading methods=> long range

▶ Coding/modulation extreme small signals up to 19.5 dB below the noise

▶ Robustness against multi-path fading

▶ Robustness against dynamic Doppler shift