

ABSTRACT

Provided are a zero crossing point signal output method and apparatus, and a power line data transmitting method and device. The zero-crossing signal output method includes: continuously receiving zero crossing point square wave signals, and periodically sampling zero crossing point square wave signals at a predetermined sampling frequency; acquiring sampling numbers of 1st to Mth zero crossing point square wave signals to obtain an average sampling number S, and calculating a first zero crossing point interval T1; setting a zero crossing point signal output interval as the first zero crossing point interval T1; continuously outputting zero crossing point signals with an interval being the zero crossing point signal output interval; obtaining sampling numbers of M+1th to M+Nth zero crossing point square wave signals, calculating a difference value between each of the sampling numbers and S, and obtaining an accumulated difference value Δs through calculation; when Δs is not within a predetermined change range, obtaining a second zero crossing point interval T2 and setting the zero crossing point signal output interval as T2; and when Δs is within the predetermined change range, keeping the zero crossing point signal output interval unchanged.

(Fig.1)