Module Type: ZETC03N/00

Transmitter Type: WPC Power Transmitter design A27, which is single to single

system, including only single primary and secondary coils.

Nominal Input Voltage: 12V DC

Output Power: Maximum 5W delivered to WPC 1.2 compliance devices

WPC Standard: Qi 1.1.2

Power Transfer frequency: 111 - 130kHz

Coil(s): Single Litz-wire coils in 60mm outer diameter and 20.5mm

inner diameter

Charging area: 12.56sqr cm active area in terms of a center point of an RX-

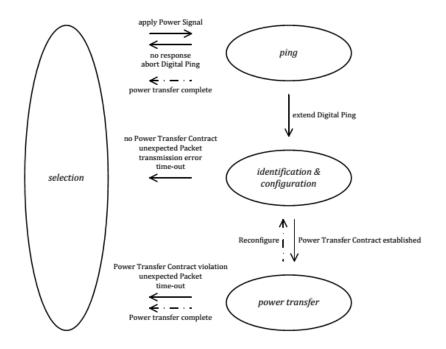
coil

Electrical Interfaces: 1.5m captive cable to external power adapter (AWG24)

Connectivity: Receiver is put on the surface of transmitter directly, and a

wireless communication between TX and RX is applied,

which is as following flow chart shown:



From a system control perspective, power transfer from a Power Transmitter to a Power Receiver comprises four phases, namely selection, ping, identification & configuration, and power transfer. Figure illustrates the relation between the phases. The solid arrows indicate transitions, which the Power Transmitter initiates; and the dash-dotted arrows indicate transitions that the Power Receiver initiates. By definition, if the Power Transmitter is not applying a Power Signal, the system is in the selection phase. This means that a transition from any of the other phases to the selection phase involves the Power Transmitter removing the Power Signal.

- **Selection** In this phase, the Power Transmitter typically monitors the Interface Surface for the placement and removal of objects.
- Ping In this phase, the Power Transmitter executes a Digital Ping, and listens for a response.
- *Identification & Configuration* In this phase, the Power Transmitter identifies the selected Power Receiver, and obtains configuration information such as the maximum amount of power that the Power Receiver intends to provide at its output.
- Power Transfer In this phase, the Power Transmitter continues to provide power to the Power Receiver, adjusting its Primary Cell current in response to control data that it receives from the Power Receiver.