IDTP9030 is a highly integrated single-chip WPC compliant wireless power transmitter solution. The device integrates a variable frequency half-bridge power inverter for DC-AC conversion, capable of operating through a wide range of DC input voltages. As specified by the WPC transmitter specification, the power transferred to the device under charge is controlled by varying the switching frequency of the half bridge inverter from 110kHz to 205kHz. All the logic and other circuitry needed to receive and decode WPC compliant packets from the mobile device and to execute the requested power adjustments are also fully integrated into the IDTP9030. It contains logic circuits required to demodulate and decode WPC compliant message packets sent by the mobile device to adjust transferred power.

IDTP9030 also may be operated in proprietary modes where it employs additional proprietary functions such as two extra levels of Foreign Object Detection (FOD), 2-way secure authentication between base and mobile, and IDT proprietary control algorithms for higher efficiency.

IDT Solution Size

IDT WIRELESS POWER: SMALLER | SAFER | COST EFFECTIVE

VALUE ADDED BEYOND WPC “QI”
- Supports back channel communication
  - Transmitter communicates with Receiver
- 2-way secure authentication
- On-board microcontroller and high performance ADC for complex calculations
- GPIOs for various status/alarms indication
- Up to 7.5W power transfer in proprietary mode
WIRELESS POWER

BY IDT.

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Transmitter (TX) IDTP9030  Receiver (RX) IDTP9020