Wireless Power Transceiver Modules

Unleash the full potential of your products with jjPlus resonant wireless power transceiver modules
– the ability to transfer power wirelessly at a distance or area
– the ability to offer high tolerance of orientational mis-alignment between the transmitter and the receiver
– the ability to power through thick surfaces of various types i.e. wood, glass, stone, water etc.
– the ability to power multiple devices i.e. a single transmitter to multi-receivers configuration
– compared with Magnetic Inductive systems working in the KHz range, jjPlus’ 6.78MHz Magnetic Resonance system is much less prone to heating un-intentional metal objects, such as coins/watches to dangerous temperatures

A transceiver module pair consists of a transmitter module and a receiver module, carefully tuned to be highly resonant with each other in order to accomplish efficient wireless power transfer. The transmitter module transmits “resonant power” from the surface area of its antenna (coil) defined by X & Y = power area and to a Z = height which is the distance from the antenna surface. The receiver module, when positioned within the space defined by X, Y and Z, receives the resonant power and performs the necessary conversions to supply to a load which is typically the battery to be charged.

10 Watt
Transceiver Module Pair
Output power: Max 10W, 5V/2.0A to load

<table>
<thead>
<tr>
<th>Transmitter Module CMT010A</th>
<th>Receiver Module CMR010A</th>
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<tbody>
<tr>
<td>Tx Power Area (X-Y): 115 x 60mm</td>
<td>Rx Receiving Area (X-Y): 57 x 39mm</td>
</tr>
<tr>
<td>Tx Power Distance (Z): 15mm optimum</td>
<td>Rx Footprint: 71 x 52 x 2mm</td>
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<tr>
<td>Tx Footprint: 150 x 76 x15mm</td>
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20 Watt
Transceiver Module Pair 1
Output power: Max 20W, 9.3V/2.15A to load

<table>
<thead>
<tr>
<th>Transmitter Module WCTC401</th>
<th>Receiver Module WCRC503</th>
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<tbody>
<tr>
<td>Tx Power Area (X-Y): 150 x 100mm</td>
<td>Rx Receiving Area (X-Y): 70 x 55mm</td>
</tr>
<tr>
<td>Tx Power Distance (Z): 30mm optimum</td>
<td>Rx Footprint: 135 x 64 x 9mm (coil board), 79 x 37 x 5mm (control board)</td>
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<tr>
<td>Tx Footprint: 240 x 140 x 9mm (coil board), 180 x 70 x 14mm (control board)</td>
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20 Watt Transceiver Module Pair 2
Output power: Max 20W, 20V/1.0A to load

Transmitter Module CMT020B
Tx Power Area (X-Y): 130 x 90mm
Tx Power Distance (Z): 35mm optimum
Tx Footprint: 138 x 115 x 1mm (coil board), 138 x 82 x 13mm (control board)

Receiver Module CMR030A
Rx Receiving Area (X-Y): 97 x 57 mm
Rx Footprint: 97 x 66 x 14mm

30Watt Transceiver Module Pair
Output power: Max 30W, 20V/1.5A to load

Transmitter Module CMT030A
Tx Power Area (X-Y): 140 x 120mm
Tx Power Distance (Z): 35mm optimum
Tx Footprint: 195 x 155 x 1mm (coil board), 195 x 80 x 14mm (control board)

Receiver Module CMR030A
Rx Receiving Area (X-Y): 97 x 57 mm
Rx Footprint: 97 x 66 x 14mm