



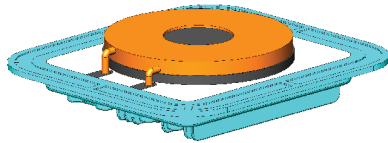
Corian.
CHARGING SURFACE

DUPONT™ CORIAN® CHARGING UNIT

15W Qi + PMA Dual-Mode Wireless Power Transmitter

DESCRIPTION

The DuPont™ Corian® Charging Unit - Individual is a complete, self-contained system. It contains a custom dual mode controller for managing the Qi or PMA protocol and charging functions.



The unit will automatically adjust the charging power, based on the feedback command from the receiver. When a Qi or PMA compliant receiver is placed on the transmitter coil, the unit will deploy up to 15W depending on the charging capabilities of the receiver or adaptor. For example, a typical handheld device requires 5W; therefore the transmitter will deploy 5W.

APPLICATIONS

Wireless charging of Qi and PMA compliant devices:

- Cell Phones and Smartphones
- MP3 Players
- GPS Devices
- Digital Cameras
- Tablets and eReaders
- Lighting
- Toys

An adaptor is required for devices that do not have an integrated PMA or Qi receiver.

FEATURES

- Qi-compliant wireless transmitter
- PMA-compliant wireless transmitter
- LED indicators for power on, charging and error conditions
- Designed for subsurface mounting with DuPont™ Corian® and Zodiaq® for integrated technology.

DEVICE OPERATION

When a compliant receiver is placed on the transmitter coil, the unit will automatically adjust the charging power, based on the feedback command from the receiver. When charging, the LED will illuminate green for ~2 seconds, and then start flashing green to indicate charging is taking place. If the receiver coil moves too far in relation to the transmitter coil, the LED may illuminate solid red, indicating an error condition. If this (or any other error condition) occurs, remove the receiver from the transmitter, wait for the LED to turn off, and then replace the receiver on the transmitter.

| Status | Indicator |
|-------------------------|---------------------------|
| Off | No power/inactive |
| Power on | One green flash |
| Charging | Continuous flashing green |
| End-of-charge | Solid green |
| Foreign object detected | Flashing red |
| Error condition | Solid red |

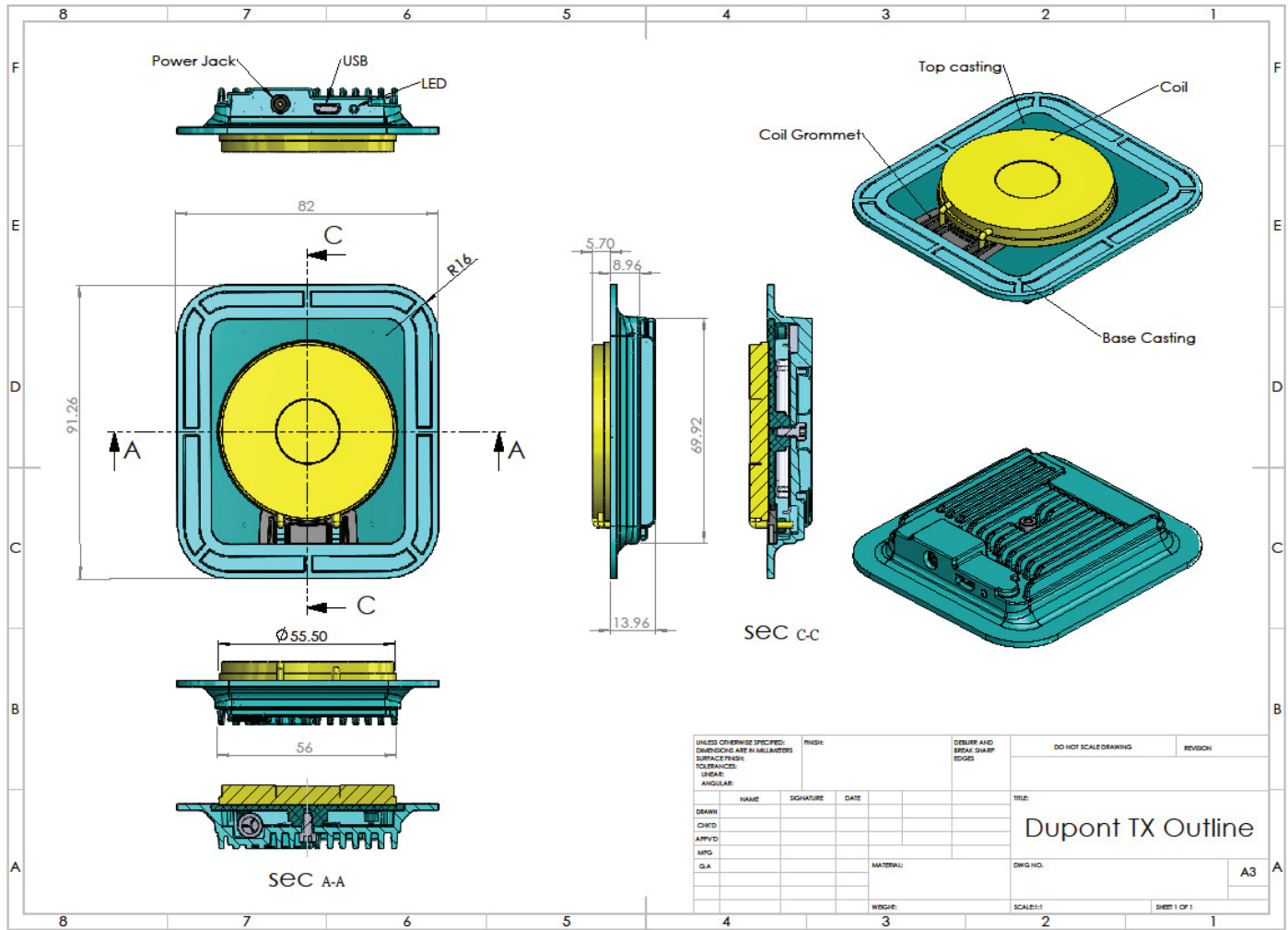
FOREIGN OBJECT DETECTION

The DuPont™ Corian® Charging Unit - Individual contains an algorithm for sensing the presence of foreign objects placed on the unit. When a foreign object is placed on the transmitter coil during operation, the unit will shut down and the LED will flash red if the object interferes with the system.

DUPONT™ CORIAN® CHARGING UNIT

15W QI + PMA DUAL-MODE WIRELESS POWER TRANSMITTER

MECHANICAL DIMENSIONS



ELECTRICAL AND MECHANICAL SPECIFICATIONS

| Dimension | Description |
|--|--|
| Length | 3.6" (91mm) |
| Width | 3.2" (82mm) |
| Recommended material thickness between the top of the coil and the top surface | Corian® 8mm, Zodiaq® 10mm A pocket will need to be milled to specified thickness. Zodiaq® will need additional milling to accommodate the flange. |

| Connection | Description |
|------------|--|
| DC Input | 19V, 1.35A |
| Micro USB | Port for firmware updates |
| LED | Indicates charging (green flashing), end-of-charge (green solid), foreign object detect (red flashing), or error condition (red solid) |

TEMPERATURE

| | |
|---|---|
| Operating Ambient, normal mode ambient: | 32°F min / 86°F max. (0°C min / 30°C max.) |
| Non-operating Ambient: | -40°F to 158°F (-40°C to +70°C) (Maximum rate of change of 36°F (20°C)/hour) |

HUMIDITY

| | |
|----------------|---|
| Operating: | To 85% relative humidity (non-condensing) |
| Non-Operating: | To 95% relative humidity (non-condensing) |

ALTITUDE

| | |
|----------------|----------------|
| Operating: | to 10,000 feet |
| Non-operating: | to 50,000 feet |



DUPONT™ CORIAN® CHARGING UNIT 15W Qi + PMA DUAL-MODE WIRELESS POWER TRANSMITTER

WARRANTY

The DuPont™ Corian® Charging Unit – Individual is covered by a one-year limited consumer warranty that provides product replacement only. Please visit corian.com/cs-warranty for more information.

PRODUCT REGULATORY REQUIREMENTS

Intended Application – This product is intended for indoor use

PRODUCT SAFETY

IEC60950-1 (International)

WIRELESS STANDARDS COMPLIANCE

Qi Interoperability Test Specification v1.3 -
Interoperability ID: IDD11150475T

PRODUCT EMC COMPLIANCE – CLASS B COMPLIANCE

NOTE: The product is required to comply with Class B emission requirements as the end system that it is configured into is intended for a commercial environment and market place. System is to have minimum of 3db margin to Class B Limits.

FCC /ICES-003 - Emissions (USA/Canada) Verification

CISPR 22 – Emissions (International)

EN55022 - Emissions (Europe)

EN55024 - Immunity (Europe)

- EN61000-4-2 Electrostatic Discharge
- EN61000-4-3 Radiated RFI Immunity
- EN61000-4-4 Electrical Fast Transients
- EN61000-4-5 Electrical Surge
- EN61000-4-6 RF Conducted
- EN61000-4-8 Power Frequency Magnetic Fields
- EN61000-4-11 Voltage Dips and Interruptions

EN61000-3-2 - Harmonics (Europe)

EN61000-3-3 - Voltage Flicker (Europe)

CE – EMC Directive 89/336/EEC (Europe)

Certifications / Registrations / Declarations

UL Certification (US/Canada)

FCC/ICES-003 Class C Attestation (USA/Canada)

CE Declaration of Conformity (CENELEC Europe)

Legal Notices

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