

ELYX-40A Wireless PowerTransfer Solution



1 Tx control module 2 Tx coil module 3 Rx coil module 4 Rx control module

FEATURE

- High distance charging range / Robust to misalignment
- Maximum 3,000W transmitting power
- Receiver programmable according to battery specifications (7–14s Li-ion battery, Max 40 A)
- Protection: over voltage / over current / over temperature / Foreign Object Detection (FOD)
- High End-to-End Efficiency (DC-to-Battery) (Max. 88%)
- Pre-Charge / Full-Charge Function (User Setup)
- Compatible with wired charging and wireless charging
- Cloud Server Monitoring & Power Management / [Eta-PMS \(eta-on-pms.com\)](http://eta-on-pms.com)

Eta Electronics contact@etaelec.com

HQ 38542 2514, Globalventure-dong, Gyeongbuktechnopark, 27, Sampung-ro, Gyeongsan-si, Gyeongsangbuk-do

R&D 04314 6F, 271, Wonhyo-ro, Yongsan-gu, Seoul

- **SYSTEM COMPONENTS**
- Transmitter (DT-40A)
 - Transmitter control module
 - Transmitter coil module
- Receiver (DR-40A)
 - Receiver control module
 - Receiver coil module
- Option 1. Tx/Rx Cable length (30, 50, 100 cm)
- Option 2. Server communication (Wi-Fi, LTE)

VERSION

- Version 0.93 Mar. 2025

SPECIFICATION

TOTAL SYSTEM		
CHARGING CHARACTERISTIC	FREQUENCY	79–90 kHz
	EFFICIENCY (Max.)	88% (DC to Battery)
	CHARGE BATTERY	Li-ion battery (7–14 series pack)
	CHARGE MODE	CC/CV
	CHARGE RANGE	0–40 mm distance (z-axis) offset (10–35 mm Optimal distance) Max. ± 30 mm x-axis offset Max. ± 10 mm y-axis offset
COMMUNICATION	Server	Wi-Fi or LTE
	Application	CAN / UART
ENVIRONMENT	AMBIENTTEMP.	- 15 ~ 45°C

TRANSMITTER		DT-40A
INPUT	ACVOLTAGE	220 VAC
	CURRENT (MAX.)	16 A
DIMENSION	CONTROL MODULE SIZE	430 mm X 339 mm X 70 mm
	COIL MODULE SIZE	350 mm X 150 mm X 33 mm
PROTECTION	OVER CURRENT	Power amp. Protection
	Foreign Object Detection	Conductive material sensing & shut down

RECEIVER		DR-40A
OUTPUT	VOLTAGE RANGE	15–58.8V (Programmable voltage range)
	CHARGE CURRENT (MAX)	40 A
	CHARGE POWER (MAX)	2,352 W
DIMENSION	CONTROL MODULE SIZE	290 mm X 119 mm X 51 mm
	COIL MODULE SIZE	250 mm x 125 mm X 28 mm
PROTECTION	OVERVOLTAGE	105% rated voltage of full charged battery
	OVER CURRENT	120% rated output current

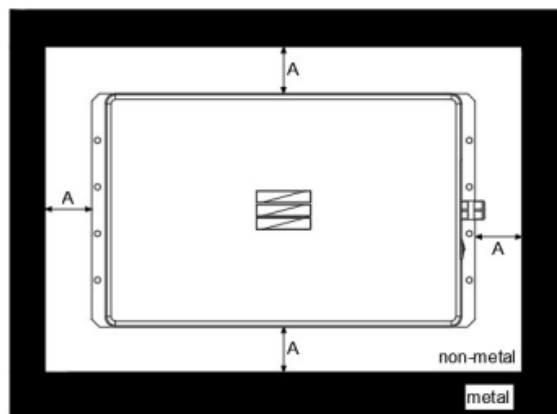
Eta Electronics contact@etaelec.com

HQ 38542 2514, Globalventure-dong, Gyeongbuktechnopark, 27, Sampung-ro, Gyeongsan-si, Gyeongsangbuk-do

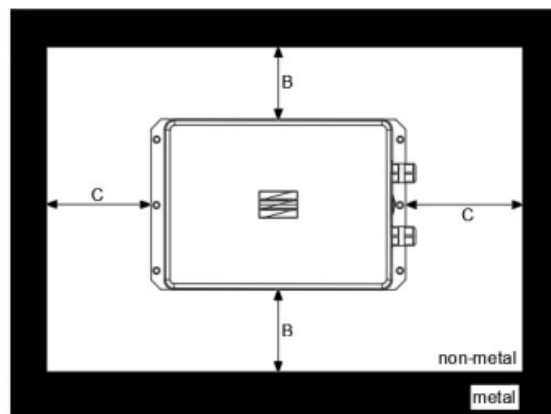
R&D 04314 6F, 271, Wonhyo-ro, Yongsan-gu, Seoul

INSTALLATION GUIDE

Tx Coil Module



Rx Coil Module



(mm)	A	B	C	D	E
Tx Coil Module	35**			*Al : 0	
				20	
Rx Coil Module		30**	120**		*Al : 0
					20

***Al : Aluminum**

****This numbers could be changed.**

Eta Electronics contact@etaelec.com

HQ 38542 2514, Globalventure-dong, Gyeongbuktechnopark, 27, Sampung-ro, Gyeongsan-si, Gyeongsangbuk-do

R&D 04314 6F, 271, Wonhyo-ro, Yongsan-gu, Seoul