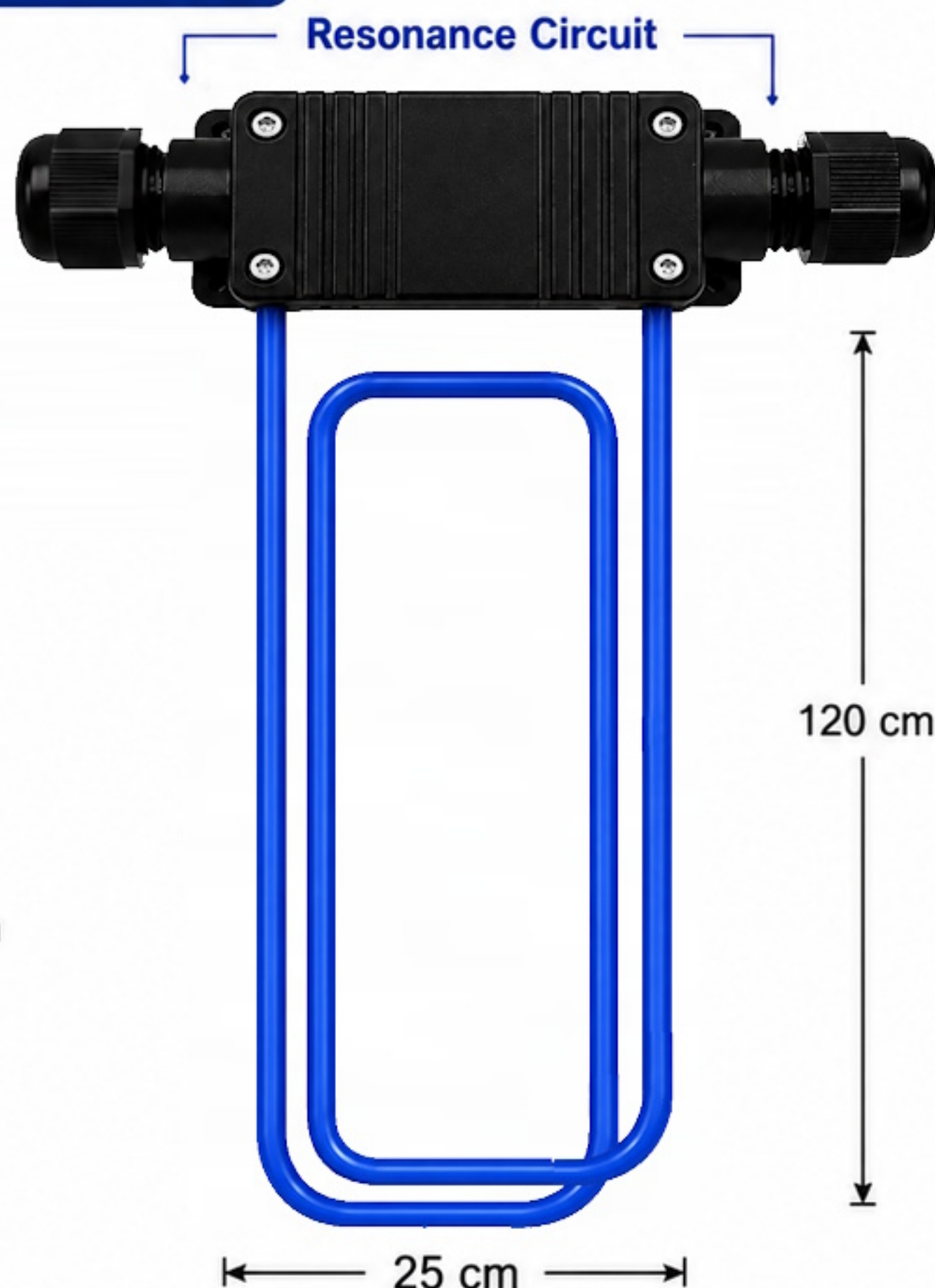


RFID ANTENNA ASSEMBLY

Model: UEM-007-100

-  High Performance
-  Weatherproof Design
-  Easy Resonance Tuning
-  Robust & Reliable

1 ANTENNA ASSEMBLY



MODEL:	UEM-007-100
LOOPS:	2
DIMENSIONS:	120 × 25 cm
WIRE OD:	6 mm
INDUCTANCE:	11–13 μ H
TUNING METHOD:	DIP SWITCH
CAPACITOR BANK:	1–225.7 nF (Total when all capacitors ON)

 The antenna resonance can be adjusted using the integrated 8-position DIP switch to optimize performance for different installation environments.



2 RESONANCE CIRCUIT

Waterproof Resonance Circuit Enclosure



- IP65 Waterproof Enclosure
- 8 Position DIP Switch
- Capacitor Bank: 1 nF – 68 nF
- Manual Resonance Tuning
- Terminal Block Connections
- PVC Cable Glands (M20)
- UV Stabilized Enclosure

Inside view (DIP switch and capacitor bank)

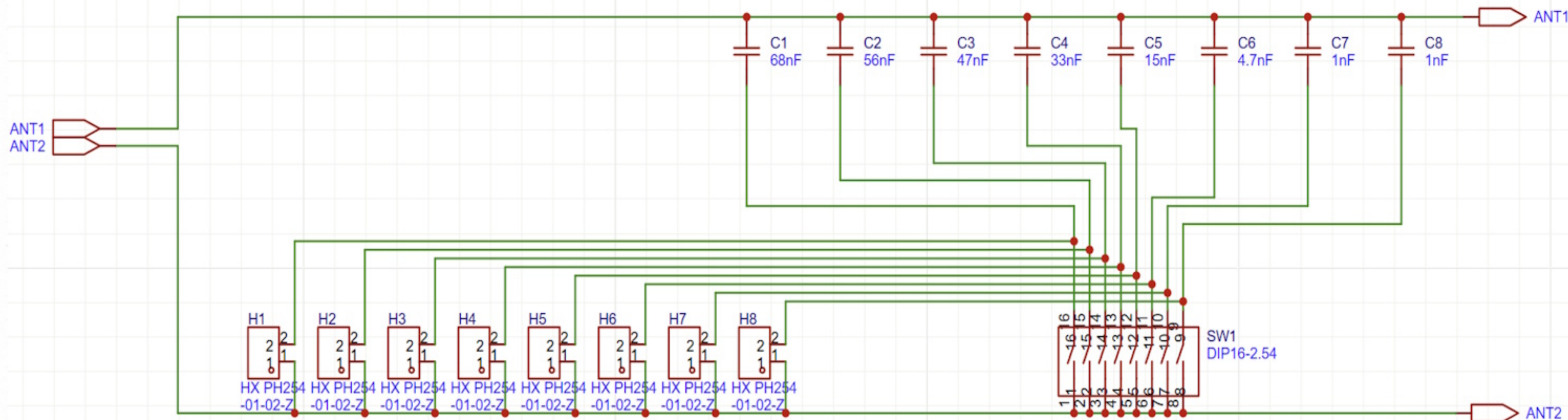


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3 RFID ANTENNA RESONANCE CIRCUIT SCHEMATIC



4 CAPACITOR CONFIGURATION TABLE (DIP SWITCH)

Capacitors are enabled by switching the corresponding DIP switch to ON.

Multiple capacitors can be combined in parallel to obtain the desired capacitance value.

DIP SWITCH	1	2	3	4	5	6	7	8
CAPACITOR	C1	C2	C3	C4	C5	C6	C7	C8
VALUE	68 nF	56 nF	47 nF	33 nF	15 nF	4.7 nF	1 nF	1 nF
TOLERANCE	±5% (All Capacitors)							
VOLTAGE RATING	≥ 50 V DC (All Capacitors)							

 Total capacitance tolerance depends on the number and combination of selected capacitors.

EXAMPLE COMBINATIONS

$$C1 + C4 + C6 = 105.7 \text{ nF}$$

$$C2 + C5 + C7 = 72.7 \text{ nF}$$

$$C3 + C4 = 80 \text{ nF}$$

$$C1 + C2 + C3 + C4 + C5 + C6 + C7 + C8 = 225.7 \text{ nF}$$



5 ANTENNA WITH LOGO PRINTING

Height: 120 cm

Width: 25 cm

Edge Margin: 5 cm

Material	PVC Coated Polyester Fabric
Fabric Weight	610 g/m ² (18 oz/yd ²)

