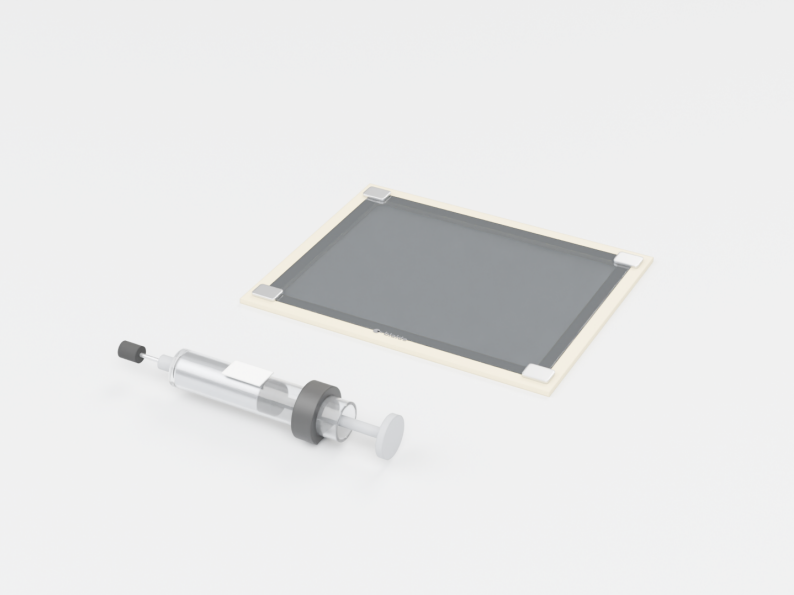
Antenna and flex pack: Specification

ANT | Blaide product line | 17 November 2026 | Design only: nothing built or tested



Requirements

- Print a working 13.56 MHz tag on film
- Tune by measurement, not guesswork

Specification

Parameter	Target
Example coil	45 x 45 mm, 0.5 mm line, 0.4 mm gap
Turns chosen	6 for a 50 pF chip at 13.56 MHz
Estimated inductance	3.049 uH (target 2.755 uH)
Estimated resistance	23.33 ohm in printed silver
Estimated quality factor	11.1
Tuning capacitance for the estimate	45.2 pF
Layers	silver coil, dielectric patch, silver bridge

Design summary

- Generator picks the turn count for the chip's capacitance
- Three print layers: silver coil and chip pads; dielectric patch; silver bridge from the inner end back to the chip
- Tune on the ZA-1: measure inductance, adjust turns or add the trim capacitor value the generator reports

All figures are design targets, calculations or planning values.