



# WALKI® Pantenna

## Sustainability meets profitability and accuracy for superb conductivity

**Walki® Pantenna is manufactured using the proprietary Walki®4E technology. It is a revolutionary way of producing flexible circuit boards efficiently and sustainably opening up a whole range of opportunities to produce conductive laminates using a patented, unique, dry process.**

### CONDUCTIVITY AND EXACTNESS WITH THE MATERIAL OF YOUR CHOICE!

The WALKI® Pantenna is produced using the patented Walki®4E process. It is based on extremely accurate laser patterning of the special laminate with an aluminium foil for superb conductivity. The process allows a flexible choice of the base substrate in the laminate, ranging from paper to different plastic films.

Walki®4E enables production of any paper-based or film laminate that needs electrical conductivity, be it intended for an RFID-antenna or for an intelligent packaging material, to name only a few enduses. It is the first feasible alternative to the traditional way of producing antennas by a wet etching process. The technology brings new dimensions of exactness, cost efficiency and sustainability to many different industries.

### RESPONSIBILITY IS A PART OF THE PATTERN

No matter what the final product is Walki®4E makes it 100% recyclable. This is achieved through the unique, dry production process, which allows for paper or some other mono-material being used as the substrate and makes aluminium process residue fully recyclable. When the final product has come to the end of its life cycle, aluminium is easily sorted out by metal detectors in a recycling process. The demand of full recyclability of consumer products is constantly increasing, since legislation in many countries moves towards greater responsibility for recycling being placed with manufacturers.

## Walki® Pantenna is manufactured using the unique Walki® 4E Technology

### E FOR ECOLOGY

- Absence of liquid chemicals
- 100% recyclable aluminium process residue
- Monomaterial converting = fully recyclable end product matching the needs for electronics recycling

### E FOR EFFICIENCY

- The dry process and the speed of laser technology provides up to 10 times faster production speed than in etching
- Computer to antenna production gives flexibility and speed to new antenna development

### E FOR EXACTNESS

- Laser technology enables extreme accuracy and reliable repeatability of patterns

### E FOR ECONOMY

- Lower total cost
- Can be used in traditional converting workflows – lower investment cost