NanoJet™ Print SubSystems

AEROSOL PRINTING MADE EASY

The NanoJet print subsystem is the industry leading aerosol-based solution for printed electronics applications, delivering superior performance for a variety of substrate shapes, ink types, and electronic requirements. The NanoJet print subsystem provides IDS' highly reliable, next generation aerosol printing technology in a package that is easily integrated onto existing print systems. The NanoJet print subsystem provides improved print performance in a reliable, user-friendly configuration for production quality printing.

ADVANTAGES

Superior Printing Performance
- Satellite-free
- Conformal
- High Accuracy

Production-Oriented Solution
- Mean-Time Between Assist >8 hour
- Line width standard dev. <5%
- variation for key performance parameters: linewidth & resistance

Ease of Use
- Reliable
- Quick material changeover

Features:

Easy integration into existing printers

Point of use aerosol generation

Interchangeable ink cartridges

Compact print head

Low cost of ownership

1 or 2 material print head

Reliable, easy operation

Easy to clean

Process Capabilities

PRINT STABILITY

Demonstrated 8-hour unattended print stability

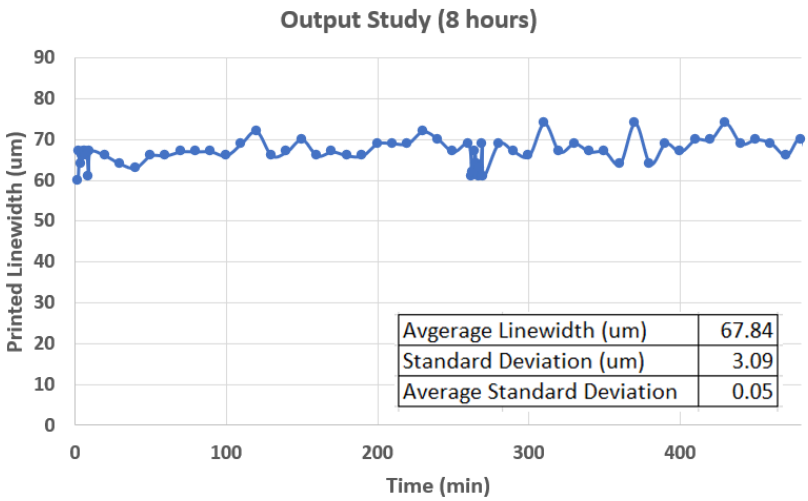
Ag nanoparticle ink

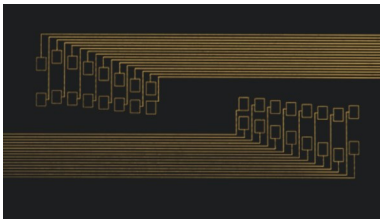
Continuous operation

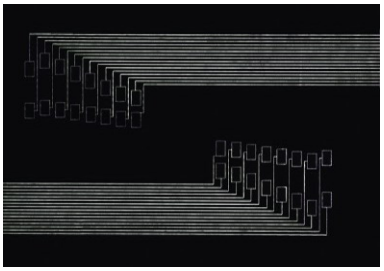
MEASURED PRINT PROPERTIES

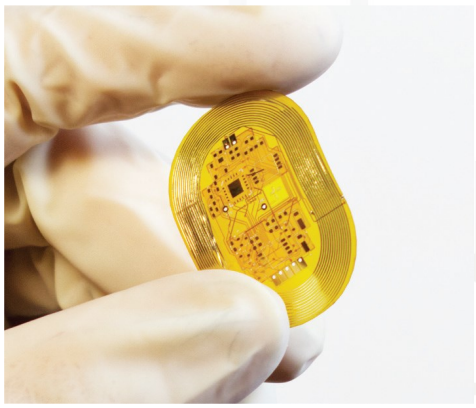
Line width 50µm ±4µm

Resistance 73Ω ±5Ω









PROCESS ATTRIBUTES

Inks
Polymer, Metal, Resistive, Magnetic

Line
10 - 1000 µm

Single Pass Line Thickness
100 nm - 4 µm

Working Distance
2 - 10 mm

Print Speed
5 - 50 mm/s

NanoJet ™ Printer Utility Interface

POWER - 120/240VAC - 5/3A 50/60 Hz

GAS - Dry air or N2 - 10 psig/0.7 Bar, 200 sccm

COOLING - 2 lpm flow, 60 W min.