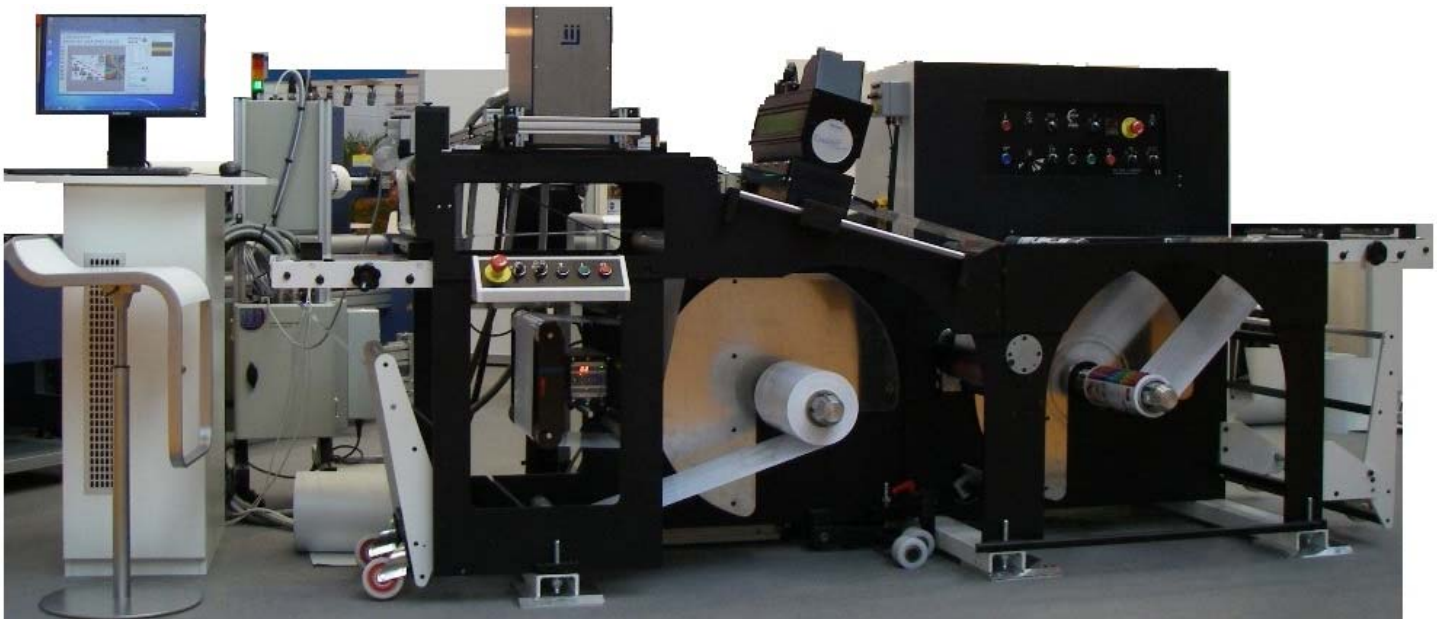




We Deliver Innovation

PRINTED ELECTRONICS



8500 Shoal Creek Blvd, Bldg 4, Ste 200

Austin, TX 78757

Tel: (512) 996-8833 x 302

Fax: (512) 873-7744

www.omegaoptics.com



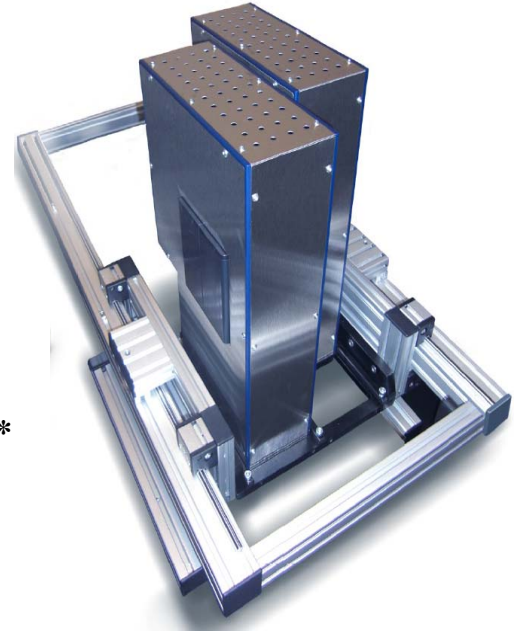
PRINTED ELECTRONICS – CUSTOM SOLUTIONS

- We offer customized solutions for complete ink-jet print systems.
- Our print systems can be easily customized to fit customer's needs.

Hardware/System Specifications

Printheads and Ink Systems:

- Single material
- 256, 512, 1024, and 1800 nozzles
- 360dpi native resolution
- Suitable for use with high viscosity, aqueous, solvents and UV inks
- Heater option available
- Ink systems with/without degassing units*
- Ink supply systems for up to 100+ printheads*
- Range of control electronics and software solutions**



Print Engines:

- Printhead unit slides out for simple, rapid and easy cleaning. Slides and cleaning tray included.
- Ink and electronics cabinets can be mounted within the customer's production equipment.
- An alternative stand-alone trolley is available.
- Ink supply bottles can be changed without stopping print.
- Customised versions available – different print speeds, print widths, and print resolution.
- Solution for multi-stage single pass systems available*
- Please contact us and we will be happy to talk to you regarding your requirements



* please contact our sales department at sales@omegaoptics.com to check for availability

** selection available based on customer requirements. Please contact sales department for details

- Various print widths available. Please refer to the table below for details *

	MonoPrint 72	MonoPrint 142	MonoPrint 282 Slim	MonoPrint 352 Slim
Print Width	72mm	142mm	282mm	352mm
No. of Printheads	1	2	4	5
Printhead enclosure dimensions (incl. header tanks).	98mm wide in direction of substrate travel x 220mm deep x 354mm high.	184mm wide in direction of substrate travel x 250mm deep x 363mm high.	137mm wide in direction of substrate travel x 487mm deep x 586mm high.	137mm wide in direction of substrate travel x 557mm deep x 586mm high.
Other dimensions	Head Drive: 400 High x 400wide x 210mm deep. Weight = 10 kg Ink Control: 430 High x 320wide x 185mm deep. Weight = 9 kg (548mm incl. beacon) Ink Fluids: 400 High x 400wide x 210mm deep. Weight = 12 kg (no fluids) 4 x flexible conduits (connecting printheads control and ink supply): 35mm diameter x 3m long (4m for CP352). Custom conduit lengths available to order.			
Colour	Monochrome			
Resolution	360dpi Binary or Grey-scale			

Control Electronics:

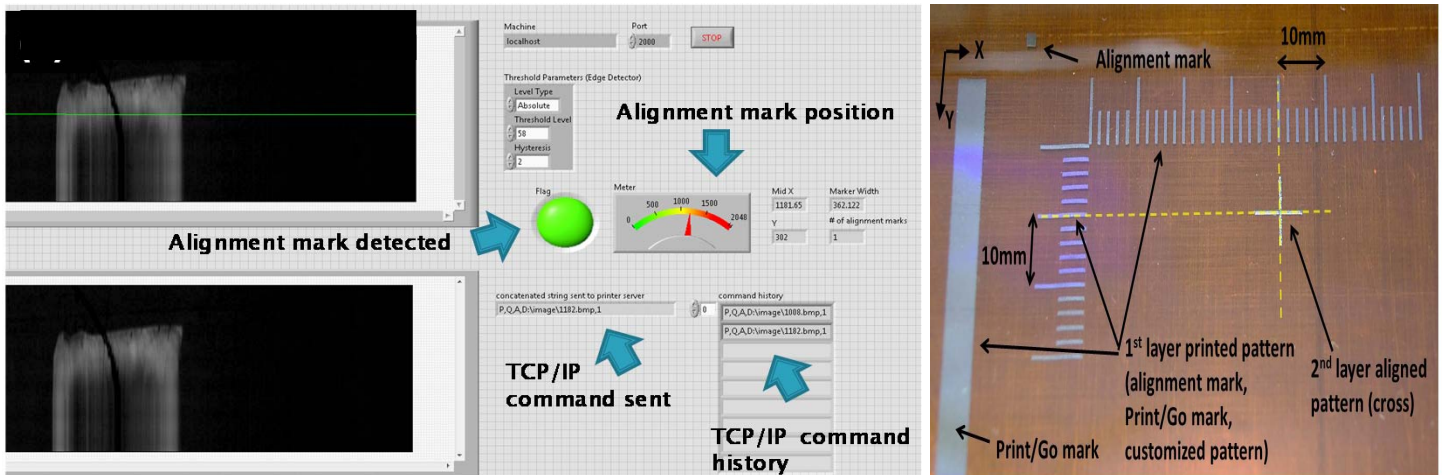
- Control electronics for print heads and engines provided by partners IIJ and Global Inkjet Systems.
- We can customize solutions compatible with other third-party software used by the customer



Software Specifications

In-line registration ‡:

- We also provide in-line registration.
- <100µm alignment accuracy @ 3m/min between multiple prints



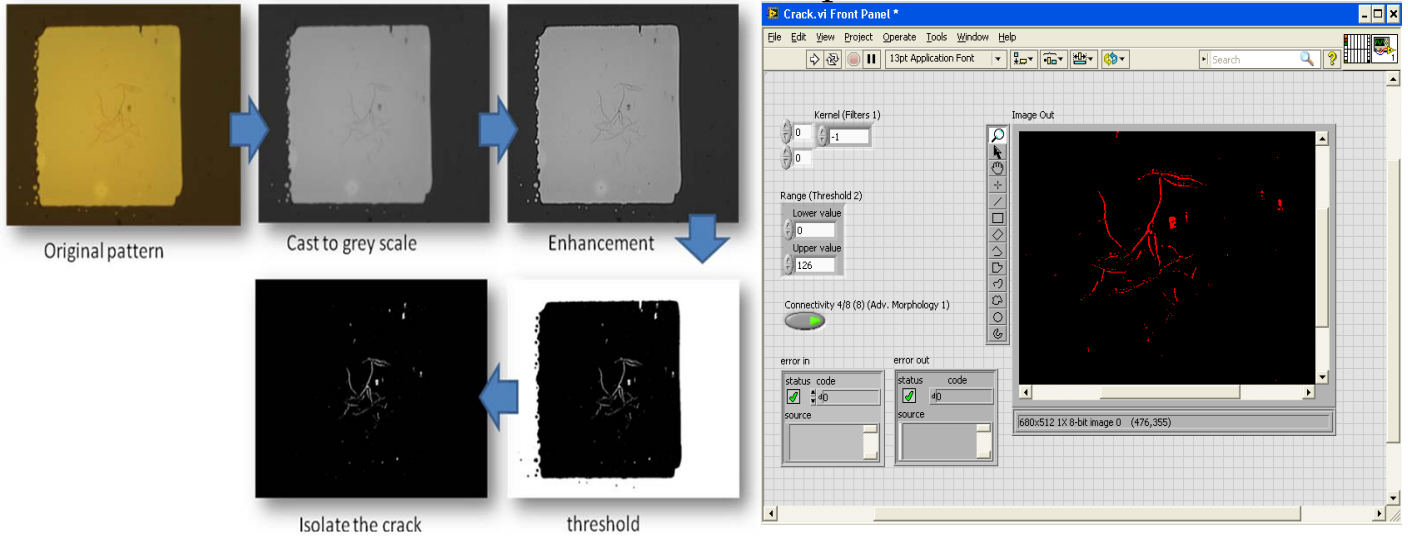
The image shows a software interface for in-line registration. On the left, a camera view shows a printed pattern with a green alignment mark. The interface includes a 'Threshold Parameters (Edge Detector)' section with settings for Level Type (Absolute), Threshold Level (58), and Hysteresis (2). A 'Flag' section shows a green sphere. A 'Meter' shows a scale from 0 to 2040. The 'Alignment mark position' is indicated by a blue arrow. The 'TCP/IP command sent' section shows the command 'P,Q,A,D:\image\1182.bmp,1'. The 'TCP/IP command history' section shows the command 'P,Q,A,D:\image\1088.bmp,1'. On the right, a printed pattern shows a 1st layer printed pattern (alignment mark, Print/Go mark, customized pattern) and a 2nd layer aligned pattern (cross). The alignment mark is 10mm wide and 10mm high. The Print/Go mark is 10mm wide and 10mm high. The customized pattern is 10mm wide and 10mm high.

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‡ optional – additional fee may apply

Defect Identification ‡:

- Detect and notify user of defects in the print
- Customizable based on customer needs and specifications



Print Services

- We also help with design, prototype building and testing, and packaging of custom designs based on customer needs*.
- Please talk to us to see if we can serve your design needs*.
- Small to medium volume orders processed by us. Large volume manufacturing available through our partners.

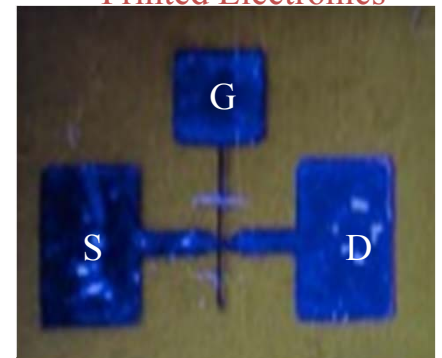
R2R Manufacturing



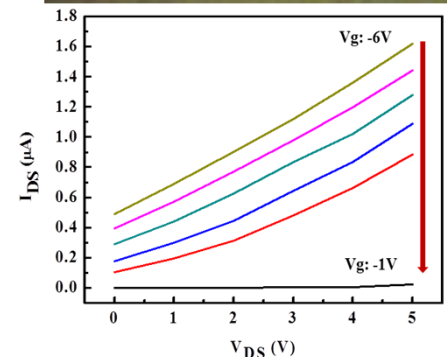
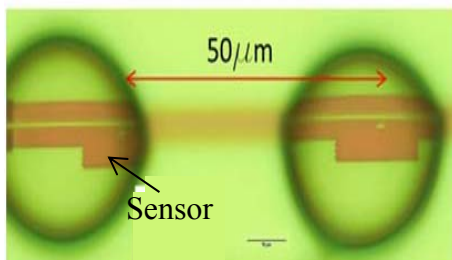
Antenna



Printed Electronics



Bio/Chem Sensors



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‡ optional – additional fee may apply