

Multi-Layer Flexible Electronics Digital Printer

The QuickLabel[®] **QLS-4100 Xe** Ruggedized Color Label Printer can rapidly process and print data-intensive labels via enterprise software. At 300 dpi, the **QLS-4100 Xe** is capable of printing 7 ips with four color CMYK process thermal transfer ribbons, or up to four spot colors in one pass, ensuring accurate registration.

Easily print labels with barcodes, color codes, logos, flexible electronics, graphics, product description text, serializing text, and prompted fields.



QLS-4100 Xe
Ruggedized Color Label Printer

- **Built-in ribbon saver- save on material costs throughout the lifetime of the printer**
- **Produces UV resistant labels**
- **UL recognized ribbons & substrates. Perfect for automotive, outdoors, and other demanding applications**



On-demand production of printed electronics is now possible with the combination of the **QLS-4100 Xe** platform and IIMAK's Metallograph[®] conductive thermal transfer ribbon (TTR). An established digital printing technology, thermal transfer is easy and cost-effective for short-run production, rapid prototyping, and design verification.



Metallograph® Printed Electronics

Available for all thermal transfer printers and with wide substrate latitude, the Metallograph TTR provides consistent conductive thickness allowing for easy production of membrane switches, electroluminescent lights, RFID, smart packaging and textiles, and a variety of printed electronics.

Dielectric thermal transfer ribbons are for those non-conductive layers.

An easy, cost-effective digital printing method for producing flexible circuits, creating possibilities within RFID, low power printed circuits, environmental sensors, and more.



Toll-free: 877-757-7978 • Tel: +1 401-828-4000
info@quicklabel.com • www.quicklabel.com

Typical Properties of IIMAK Aluminum Ribbons

Volume Resistivity	3.00 $\mu\Omega$ -cm
Surface Resistance	0.030 Ω /sq.
Power Capacity	2.50 W
Maximum Current Density	120 mA/cm ²
Aluminum Thickness	260 nm
Cross – Hatch Adhesion Test (ASTM F1842-09)	3M 200 Grade 5 3M 622 Grade 5
Bend Test (ASTM F2750-09) Percent increase in resistivity after first bend – Compression	0.64%
Bend Test (ASTM F2750-09) Percent increase in resistivity after first bend – Extension	0.41%
Bend Test (ASTM F2749-09) Percent increase in resistivity after first bend – Compression	2.50%
Bend Test (ASTM F2749-09) Percent increase in resistivity after first bend – Extension	2.20%
Environmental Aging Test (ASTM F1996-06) 38°C, 95% RH, 10 Days	Pass

• All technical information is accurate to the best of IIMAK knowledge. IIMAK does not warranty or guarantee results.



SPF-Inc. is a consultant and an expert source for technical service and assistance with applications in printed electronics and microfluidics.