

LASER PHOTO PLOTTERS

### DIRECT IMAGERS

# SilverWriter 8850 P



SOFTWARE

- Resolutions up to 25,400 ppi
- Raising the Throughput Benchmark
- Reliable 24/7/52
- Unequalled Accuracy
- Compatibility & Upgradeability

## **Unequalled Accuracy**

With its unique optical system the SilverWriter 8850-P will plot the tightest toleranced designs with pin-sharp quality. 16 plot resolutions up to **25,400 ppi** (1 $\mu$ m) deliver the optimum setting for every image down to **12.7\mum** features. Two unique imaging functions, syntectic modulation and **sub-micron** pixelplacement, eliminate the rounding errors found on conventional plots and hold linewidth accuracy below 2 $\mu$ m. Dynamic beam positioning and the patented stress-free film loader ensure an unrivalled **geometric accuracy** on every plot for perfect side-to-side registration.

## **Compatibility & Upgradeability**

The SilverWriter 8850-P accepts plot instructions directly in Gerber, DPF, Genesis, OI5000 (Expert) or MDA formats, making it a "wheel-in" replacement for conventional plotters. **Choose** from up to 16 resolutions (metric and imperial) per machine, & 1 - 3 film magazines. With a well-proven **upgrade path** we can set up a SilverWriter 8850-P to your precise requirements now and in the future.

## Get more out of your photo plotter investment with GCS software

**Ucamco's Geometric Correction System (GCS)** automatically modifies phototools to compensate for the non-linear and linear distortions introduced into a panel during the manufacturing process. By improving layer registration, GCS delivers increased factory yields and extends the plant capabilities with confidence into higher levels of PCB technology.

For more info please contact your local Ucamco distributor or mail us at info@ucamco.com.

## MARKETS

#### Rigid PCB Mfr ✓ Flex PCB Mfr ✓ Flex-Rigid PCB Mfr ✓ HDI PCB Mfr ✓ PCB Masslam Mfr ✓ PCB Equipment Mfr PCB Traders PCB Designers PCB Designers PCB Test Centers IC Packaging ✓ Chemical Milling ✓ High Resolution Graphic Arts ✓ Flat Panel Display ✓

### **PRODUCT FAMILIES**

CAM PreCAM and Engineering Electrical Test Equipment Front Ends Format Converters & RIP's OEM Software

Laser Photo Plotters ✓ Direct Imagers

## **Raising the Trhroughput Benchmark**

The new SilverWriter 8500-P introduces film-handling sophisticated new and operational sequencing to deliver up to 60% more films per hour than Ucamco's previous market leader, the SilverWriter 800. 15 times faster data processing handles the most complex PCB files without rasterizing delays. For maximum flexibility and cost control all machines can take 3 independent magazines holding a total of 450 sheets of film of 3 different sizes. New drive technology delivers unrivalled uptime and long-term reliability plus a 30% smaller foot-print for easier installation.

## Reliable 24/7/52

The SilverWriter 8850-P is engineered for round the clock, **long-term reliability**. The ultra-stable granite bed, maintenance-free linear motor, air-bearings and the new directdrive drum deliver unparalleled long-term uptime - your guarantee of on-time deliveries, low whole life costs and an optimum return on your investment.

# SilverWriter 8850-P

Resolutions	Imperial	Metrical
Imperial	4,000 up to 25,000 ppi + 2000 ppi draft quality	
Metric	6.25 $\mu m$ up to 1 $\mu m$ + 12.7 $\mu m$ draft quality	
Min. line width	0.5 mil	12.7 μm
Productivity for an 18" x 24" plot $^{(*)}$	8850-P	
2000 ppi (in films / hour)	27.0	
4,000 ppi (in films / hour)	19.2	
8,000 ppi (in films / hour)	12.2	
16,000 ppi (in films / hour)	6.4	
25,400 ppi (in films / hour)	3.5	
Film Requirements	Imperial	Metrical
Film format along the drum	18" – 32" in ½" steps	457-813 mm
Film format around the drum	24-29 in 1" steps"	610-736 mm
Max. image format along the drum	0.2" (5 mm) less than film t	format
Max. image format around the drum	0.9" (23 mm) less than film format	
Sheet tolerance	± 0.02"	± 0.5 mm
Accuracy	Imperial	Metrical
Geometric plotter accuracy	< 0.16 mil	< 4 µm
Geometric plotter repeatability	< 0.08 mil	< 2 µm
Global positioning accuracy	0.01 mil	0.25 μm
Geometric accuracy on film	< 0.5 mil	< 12.5 µm
Geometric repeatability on film	< 0.5 mil	< 12.5 μm
Line-width accuracy	< 0.08 mil	< 2 μm
Scaling adjustments	In steps of 0.2 $\mu$ m – up to ± 5%	
Machine Characteristics	Imperial	Metrical
Online conveyor	Standard included – integrated in the laser plotter	
Film magazines(s)	1 standard – 2 <sup>nd</sup> and 3 <sup>rd</sup> optional – all full film size	
Film loading capacity	Up to 3 magazines. 150 sheets of film in each	
Light source	Red HeNe laser, 632.8 nm, 5 mW	
Dimensions (WxD) incl. online conveyor	72.8" x 64.2"	1850 x 1630 mm
Height	54.3"	1380 mm
Weight	3300 lbs	1500 kg
Room temperature during operation	70° F ± 2°	21° C ± 1°
Relative humidity during operation	50% ± 2%, no condensation	
Relative humidity rate of change	Max 6% per hour	
Electrical Power Supply	2 x 230 VAC, 2,000 VA	
Heat dissipation	2,000 W (1,725 kcal/h)	
Compressed air supply	87 – 145 PSI	6 –10 bar
Compressed air quality	Free of oil and water	0.01 mg/m <sup>3</sup>
Compressed air volume	88 ft³/hour	2500 l/hour





Linear motor



Granite & Air bearings

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For more information on any of our products or services please contact us:

By e-mail: info@ucamco.com On the Web: www.ucamco.com

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