

Product Flyer

SOFTWARE

LASER PHOTO PLOTTERS

DIRECT IMAGERS

SilverWriter 8850-P



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

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 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 8850-P introduces sophisticated new film-handling 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 direct-drive drum deliver unparalleled long-term uptime - your guarantee of on-time deliveries, low whole life costs and an optimum return on your investment.

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 μ m) deliver the optimum setting for every image down to **12.7\mum** features. Two unique imaging functions, syntectic modulation and **sub-micron** pixel-placement, eliminate the rounding errors found on conventional plots and hold linewidth accuracy below 2 μ 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.

Technical Data

Film format along the drum

Film format around the drum

SilverWriter 8850-P

| Resolutions | Imperial | Metrical | |
|---|---|----------|--|
| Imperial | 4,000 up to 25,000 ppi + 2000 ppi draft quality | | |
| Metric | 6.25 μ m up to 1 μ m + 12.7 μ m draft quality | | |
| Min. line width | 0.5 mil | 12.7 μm | |
| Productivity for an 18" x 24" plot ^(*) | 8 | 850-P | |
| 2000 ppi (in films / hour) | 2 | 27.0 | |
| 4,000 ppi (in films / hour) | 1 | 19.2 | |
| 8,000 ppi (in films / hour) | 1 | 12.2 | |
| 16,000 ppi (in films / hour) | | 7.1 | |
| 25,400 ppi (in films / hour) | | 3.5 | |
| Film Requirements | Imperial | Metrical | |

18" – 32" in ½" steps

24-29 in 1" steps"

| Max. image format along the drum | 0.2" (5 mm) less than film 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 μ m – up to ± 5% | | |

| Machine Characteristics | imperiai | Metrical | | |
|--|--|------------------------|--|--|
| Online conveyor | Standard included – integrated in the laser plotter | | | |
| Film magazines(s) | 1 standard – 2 nd and 3 rd 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 – 7 μm spot size | | | |
| 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 ³ | | |
| Compressed air volume | 88 ft³/hour | 2500 l/hour | | |
| (*) Assuming nominal plotting using factory settings | | | | |







Linear motor



457-813 mm

610-736 mm

Granite & Air bearings

our products or services please contact us: info@ucamco.com www.ucamco.com

For more information on any of

AutoCAM
FaultStation 4
FixGenius
FlashRip

Integr8tor

Format Converters

Mult Job Panelizer
OEM Software
SmartAOI
SmartPlate
SmartTest

Ucam CAD Review
Ucam CAM++

Ucam Chemical Milling

Ucam ET+
Ucam SmartView
Ucam uFlex
UcamX

Geometric Correction System

Ucamco NV Bijenstraat 19, 9051 Gent, Belgium Tel: +32 9 216 99 00