



SOFTWARE

LASER PHOTO PLOTTERS

DIRECT IMAGERS

BG762000 & BG763000 & BG763500

Top Notch Medium-Resolution Large Format Plotters



- Resolutions up to 25,400 ppi
- Compatibility and choices
- Improved registration
- Utmost handling capabilities
- Unrivalled 24/7/52 reliability

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

Medium resolution

With a maximum of 25,400 ppi, the BG762000, BG763000 and BG763500 series deliver excellent line quality. Two unique imaging functions, syntectic modulation and sub-micron pixel-placement, eliminate the rounding errors found on conventional plots and hold line-width accuracy down to 2 μ m.

Compatibility and choices

Both series accepts plot instructions directly in Ucam(X)'s DPF, ODB++, Gerber, OI5000 (Expert) or MDA formats, making it a "wheel-in" replacement for conventional plotters. With up to 16 plot resolutions they deliver the optimum setting for every image down to 12 μm features. The BG76200 handles from 0.6 to 4.4 films per hour. The BG763500 with its increased speed handles 1.3 to 6.0 films per hour.

Improved registration

The BG series use the patented technology of frequency variation for the "photographic" scaling of inner layers. This eliminates micro banding resulting from adding/dropping a pixel.

Utmost handling capabilities

The film loading/unloading system is fully automated and on-line connected to the film processor. The film handling mechanism is simple, reliable and very accurate providing stress-free film loading

Unrivalled 24/7/52 reliablity

The BG series is engineered for round the clock, long-term reliability. The ultra-stable granite bed, maintenance-free linear motor, airbearings and the 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.

Get more out of your photo plotter investment with FlashRip software

- FlashRip provides optimized ripping and plotting of line images in resolutions up to 50800 ppi.
- FlashRip features automatic counter-scaling of all designated features on the plotter without the need to go back to the CAM department.
- FlashRip automatically inserts plot stamps (e.g. plot date) into the plotted image.
- FlashRip supports Geometric Correction System (GCS).
 GCS allows the user to compensate on the phototool for the linear and non-linear distortions generated on the PCB during various production steps.
 The result is a much improved layer registration, lower scrap and higher yields.
- FlashRip is scaleable for multiple processors to convert several jobs simultaneously (optional).

Depending on plotter model and job complexity FlashRip increases troughput with up to 100% and more. For more info please contact your local Ucamco distributor or mail us at info@ucamco.com.

BG762000 & BG763000 & BG763500

Resolutions				
Imperial	4,00 up to 25,400ppi			
Metric	6.25 μm up to 1 μm			
Min. line width	0.47 mil / 12 μm			
Productivity for an 95" x 62" plot (*)	762000	763000	763500	
4,000 ppi (in films / hour)	4.4	5.2	6.0	
5,000 ppi (in films / hour)	3.7	4.4	5.1	
8,000 ppi (in films / hour)	2.5	3.0	3.5	
10,000 ppi (in films / hour)	2.0	2.5	2.9	
16,000 ppi (in films / hour)	1.3	1.6	1.9	
20,000 ppi (in films / hour)	1.0	1.2	1.6	
25,000 ppi (in films / hour)	0.6	0.8	1.3	
Film Requirements	Imperial Metrical			
Film format along the drum	96.5"	:	2450 mm	
Film format around the drum	63.5" 1612 mm			
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	± 0.03" ± 0.8 mm		± 0.8 mm	
Accuracy	Imperial		Metrical	
Geometric plotter accuracy	< 0.24 mil		< 6 μm	
Geometric plotter repeatability	< 0.08 mil < 2 μm		< 2 μm	
Global positioning accuracy	0.01 mil 0.25 μm		0.25 μm	
Geometric accuracy on film	< 2 mil < 50 μm		< 50 μm	
Geometric repeatability on film	< 2 mil < 50 μm		< 50 μm	
Line-width accuracy down to	< 0.08 mil < 2 μm		•	
Scaling adjustments in steps of	0.005 mil 0.127 μm		0.127 μm	
Scaling adjustment range	± 5%			
Machine Characteristics	Imperial		Metrical	
Loading capacity	25 sheets of film			
Light source	Red HeNe laser, 632.8 nm, 5 mW			
Dimensions (W x D)	148" x 64.2"		3760 x 1630mm	
Height			1830 mm	
Weight	6600 lbs 3000 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, 3,000 VA			
Heat dissipation	1,800 W (1,550 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	106 ft ³ /hour	:	3000 l/hour	
(*) Assuming nominal plotting				







Linear scale

Linear motor

Air bearings

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

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

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

> Ucamco NV Bijenstraat 19, 9051 Gent, Belgium Tel: +32 9 216 99 00 - Fax: +32 9 216 99 12 E-mail: <u>info@ucamco.com</u> - Web: <u>www.ucamco.com</u>