

PORTABLE MICROFILM CAMERA



HIRAKAWA-35 (HK-35)

DESIGNED FOR: Portable: use for on-location microfilming where original documents cannot be removed from their source, as well as for permanently installed microfilming systems. Designed for a wide variety of applications: microfilming deeds, court records, newspapers, industrial parts catalogs, drawings, maps, blueprints, X rays, library records, etc. The HK 35 head can also be used as a ultra high resolution 35mm single-lens-reflex camera for close-ups, and still-lives.

HIGHLIGHTS: Portable compact, precise planetary single-lens-reflex simplex operation microfilm camera with vacuum platen for maximum sharpness. Entire unit including case weighs 15kg, can be set up in less than two minutes and requires only 35 X 50cm of desk space. Furnished complete with all necessary accessories in a rugged weather-proof carrying case with molded liner that assures complete protection. Reductions from 5x to 11x on baseboard. To 34x at maximum focusing distance. Electronically cycled adjustable exposure and fully adjustable pull down for maximum flexibility.

LENS: Superb, high resolving, color corrected, 70mm f/5.6 MICRO lens assures brilliant, sharp images. Aperture settings form f/5.6 f/22; helical focusing from 40—254cm covering reductions between 5 and 34.

SHUTTER: Five shutter speeds: 1/4 sec., 1/3 sec., 1/2 sec., 3/4 sec. and 1 sec. for extreme flexibility Synchronized for bulbs and electronic flash, at all speeds. The shutter can be released with button on the camera body, or with the remote control hand or foot switch supplied with the camera.

FILM: 35mm perforated or unperforated film, color or black and white on 100 foot spools (smaller amount may also be used). Unique film loading system eliminates need for long film leaders and trailers making it practical to expose as few as three or four frames at a time.

FRAME SIZE: 32 X 45 format using unperforated film in the full frame mode, 22.5 X 32 mm format in the half frame model using the half frame mask and 14 X 20mm in duplex mode. Using perforated film the format size is 24 X 36 mm in full frame mode and 18 X 24 in half frame mode. All masks are supplied with camera. The distance between frames in full frame mode can be varied from 0 mm to 10mm, and in half frame mode the distance between frames can be varied form 0 mm to 32.5mm.

- EXPOSEURES PER ROLL:** With standard 100 foot rolls 640 exposures in full frame mode of 1200 exposures in half frame mode, or 2,000 exposures with duplex mask.
- VACUUM FILM PLATEN:** Assures absolute film flatness maximum resolution.
- FILM ADVANCE:** Film is advanced and shutter is cocked automatically, making it impossible to double expose. Built-in film footage counter with manual override automatically locks the camera when film is near end of roll. Sensitive micro-switch stops camera-head motor if film tears or is not feeding properly.
- FOCUSING:** Focuses with automatic-rewinding tape measure built into camera body and single-lens-reflex viewfinder
- VIEWING:** Brilliant thru-the-lens viewing, with luminous outlines of exact fields for full & half frame fields on perforated and unperforated film.
- ILLUMINATION:** Baseboard illuminated by 4 diffused long life bulbs on adjustable light arms.
- REDUCTIONS:** 1:5 to 1:11 reductions can be made on the base-board, from 1:1 to 1:4 lower reductions under 1:5 can be made using the extension rings, and up to 1:35 reductions off the base-board. Maximum documents size 115 X 180cm off base-board, 30 X 43cm on base-board.
- TRIPOD MOUNTING:** The HK 35 can be mounted in three different positions on a tripod making it possible to shoot large, wall-hung drawings and maps, manufacturing processes, or for use as a high capacity identification camera. An optional accessory is the wall mount brackets especially designed to dampen out vibration-permits reductions up to 34X.

SPECIFICATIONS

TYPE:	Portable/Desktop planetary microfilmer	FOCUSING:	By built-in tape measure or through-the-lens finder
FILM:	35mm, Unperforated and Perforated, Color or Black & white. 30.5 (100ft)	SHUTTER:	Mirror shutter, 5 steps: adjustable shutter speed; 1/4, 1/3, 1/2, 3/4, 1sec.
LENS:	70mm Micro Lens F/5.6—22 Color-corrected high-resolution Focuses from 40—260cm	FILM HOLDER:	vacuum platen system
FRAME SIZE:	5 sizes are available with masks supplied: 32 X 45mm, 22.5 X 32mm, 24 X 36mm, 24 X 18mm, 14 X 20mm	FOOTAGE INDICATION:	Shows length of unexposed film remaining.
PULL-DOWN:	Adjustable 22.5 to 55mm by 2.5mm step	RELEASE SWITCH:	Hand or foot-operated.
DOCUMENT SIZE:	Attached Portable Stand: A5 (148 X 210mm) to A3 (297 X 420mm) Tripod or Special Stand: A5 (148 X 210mm) to B0 (1030 X 1456mm)	EXPOSURE CYCLE:	30 shots/minute (Two second/frame)
REDUCTION RATIO:	Attached Portable Stand: 1/5—1/11 Tripod or Special Stand: 1/4.5—1/35 Extension Rings: 1/1—1/4 (stepless by adjustable camera unit position on column)	ILLUMINATIONS:	4 X 60W Incandescent lamps
		ELECTRICAL REQUIREMENTS:	AC 100—120V or 220—240; 50—60Hz; 250W
		CARRY CASE:	580 X 400 X 160mm
		WEIGHT:	Total weight including carry case 15kg