



Konica Digital Minilab QD-21 System

**Hyper Innovative New Concept
Full Digital Minilab for 21st Century**

QD-21

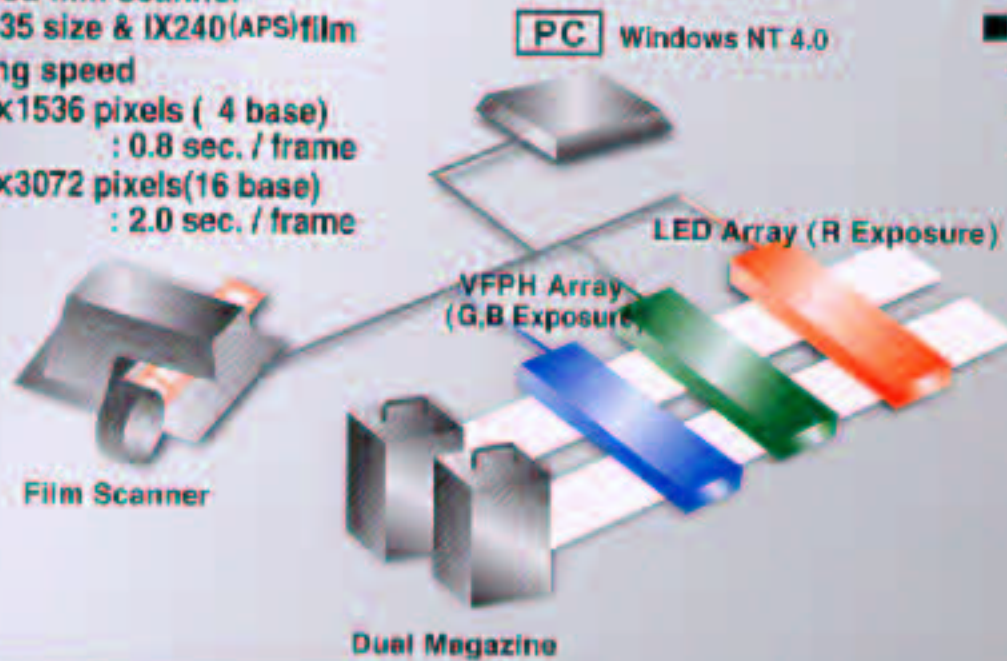


Hybrid Arrayed Line Print Head Technology

High speed, compact and low cost digital exposure unit, with a combination of newly developed LED array and VFPH array print head & precision paper transportation mechanism.

■ High-speed film scanner
for 110,135 size & IX240(APS)film

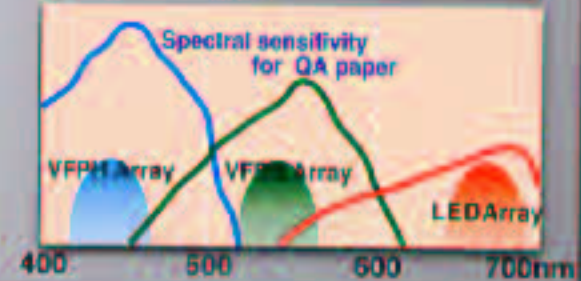
- Scanning speed
- 1024x1536 pixels (4 base)
: 0.8 sec. / frame
- 2048x3072 pixels(16 base)
: 2.0 sec. / frame



■ High-speed printing

- Output resolution : 300dpi (12 bit)
- Print exposure speed : 30mm / sec.
- Max. exposure width : 303.5mm

Processing capacity	127mm dual magazine : 5"X3.5" approx 1800 prints/hr.
Processing capacity (With monitor check)	127mm dual magazine : 5"X3.5" approx 900 prints/hr.
A4 Album prints (10 different frames)	A4 : 80 prints/hr.
A4 Wallet prints (10 duplicated images)	A4 : 300 prints/hr.



High Capacity

"Dual Paper transportation System"

Two different size paper magazines available!

Precision paper transportation technology : Parallel paper transportation (W ≤ 127mm)

Paper Width
≤ 127mm



Dual Magazine

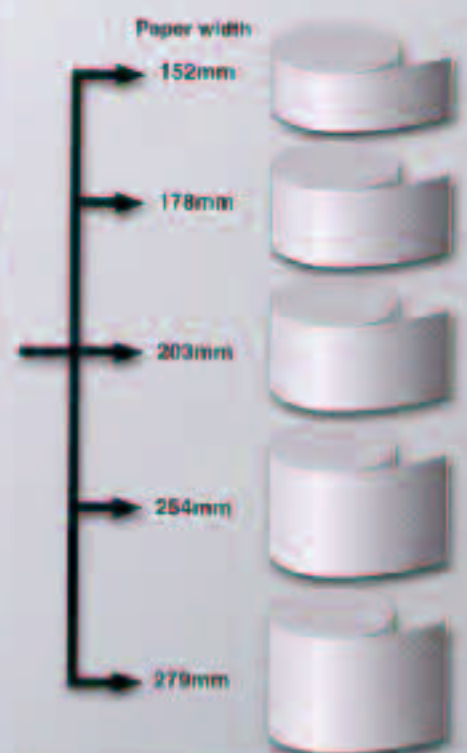
Dual Magazine
Maximum speed
5"X3.5" approx. 1800 prints/hr.
(127x127mm)



Paper Width
≥ 152mm



Single Magazine

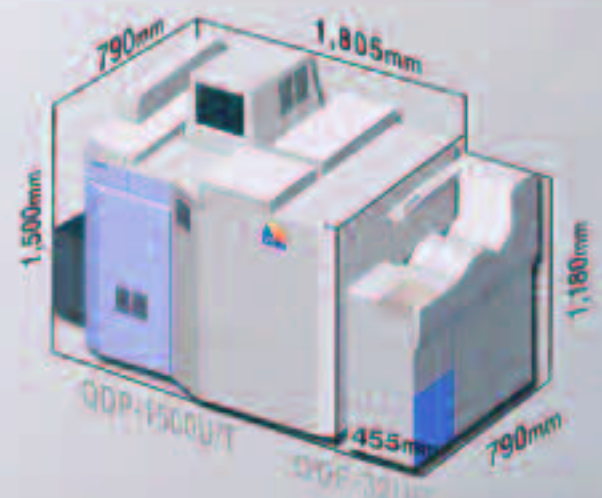
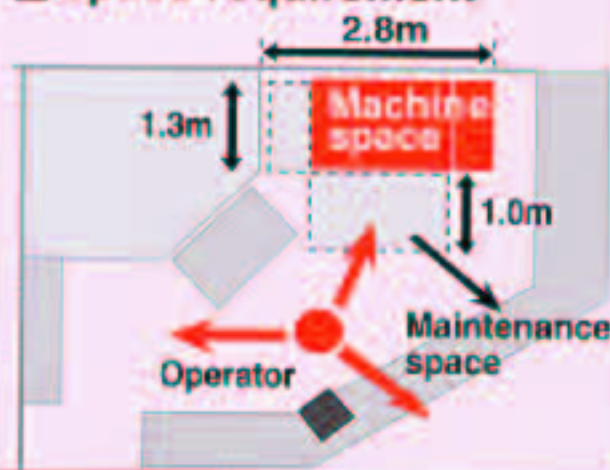


Space Saver

Footprint = 1.65m²
Fits in tighter space.

Only
1.65m²

Space requirement



Dry Operation

Further improved
ECOJET(tablet) chemical system

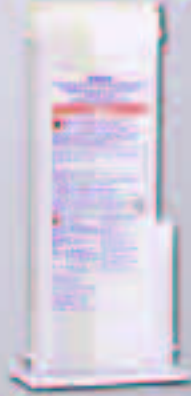
No-Odor

Only two types of **All-in-one ECOJET cartridge**
(One for film , one for paper)

Konica's Exclusive "ECOJET" Technology



Conventional
ECOJET cartridges
(for film)



All-in-one
single cartridge
(for film)

Easy Insertion of ECOJET Cartridge



for film processor
(QDF-32U/T)



for printer processor
(QDP-1500U/T)

Environmentally Friendly

Ultra-low
Replenishment
Rate

World's lowest replenishment rate, low effluent.
(Effluent volume is less than half of liquid chemical system : 94 ml per 135-24 exp. film and paper processing.)
The world's first photographic chemicals containing no hydroxylamine.

Film Processor

Leader-less transportation.

(110 size and IX240 (APS) size use short leaders.)

Built-in automatic film supplier

- Feeds up to 5 rolls (for 135 size only)
- Rolls can be added while operating

Built-in automatic film receiver (up to 6 films)



Quick Access

Film Processing : Dry to Dry **4 min. 22 sec.**

Paper Processing : Dry to Dry **1 min. 19 sec.**

Easy Touch-Screen Operation



Order handling, service menu, print format setting...

All operations prompted by easy touch screen display.

Photo Frame Prints



Photo Calendars



Greeting Cards



Passport Photos



Value-added Services

Optional templates support a rich variety of digital print services
Q File Print is Konica's proposal for a new print service format.

These print pictures are simulated.

Q File Prints

8.5"x11"
(216x279mm)

Q File 10

Q File 4

Q File 3



Package Prints



4"x6"
(102x152mm)



8"x10"
(203x254mm)



5"x7"
(127x178mm)



5"x7"
(127x178mm)



11"x14"
(279x356mm)

Automatic Under/Over-exposed Correction

Under / over-exposed correction mode automatically adjusts under-exposed / over-exposed film printing to optimum results.



under



over



Vivid Color Mode

Vivid Color Mode offers automatic color management for prints with beautiful, healthy skin tones and brilliant blue skies. Skin tones are vibrant and healthy, skies are bluer, clouds are whiter, and landscapes seem real.



Automatic Sepia & B / W Tone Prints

Sepia or B / W tone prints can be made by one-touch operations even from color originals.



Sepia



Black & White



CRT monitor displays differ from actual system. These print pictures are simulated.

Excellent Print Quality

Hyper Print Enhancement

Konica's unique Hyper Color Manipulation system guarantees beautiful prints from all types of image data. Through automatic color correction, it enables print services with a much higher level of quality than conventional prints.

Regardless of negatives, it delivers beautiful pictures in color, monochrome, sepia ...



Easy Touch-screen Operation

Easy touch-screen operation allows operators to select from a variety of print styles upon customer's requests.



Photo Express Service

(Konica Digital Photo Express is a general term referring to all of Konica's photo digital print services.)

Value Added Prints

Q File Print adds a new page to the history of photography through formats like Q File-10, which features 10 card-size frames laid out on A4/Letter paper.



Q File (8.5"x11")



Calendar



Package Prints

D Print (VGA size)

Output in VGA size from digital still cameras and digital media files.
Easy index printing



Standard Print

For both 135 size and IX240 (APS) film



Disk Write Service



Write data to Floppy disks, CD-R, MO, Zip

CD-R Album Service



Use CD-R discs as customer cards. One CD-R holds 50 rolls of 24 exp. film, for a new kind of album service.

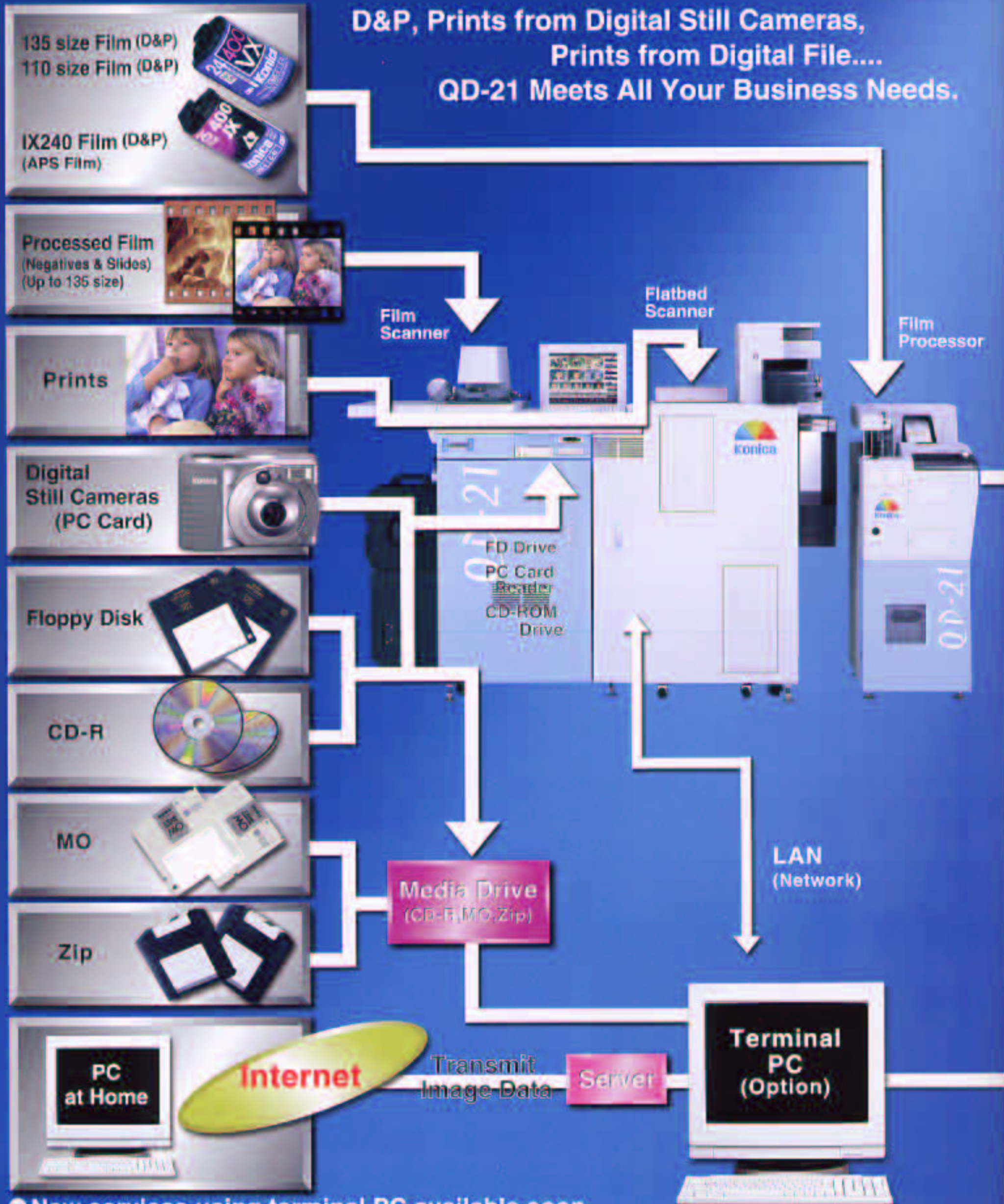
Internet Upload Service

Upload your customer's favorite photos to the Internet. Can be viewed or downloaded from PCs in the home.



Welcome to **Konica** *Digital*

D&P, Prints from Digital Still Cameras,
Prints from Digital File....
QD-21 Meets All Your Business Needs.



● New services using terminal PC available soon.

Conventional D&P services & Value-added digital services

QD-21 meets all your business needs.

From All Media

High-speed prints on photographic paper from any media. Responds to virtually any demands from customers. Value-added services for increased sales and higher profits.



135, 110 film
X 240 (APS) film



135 slide
X 240 (APS) slide



Prints



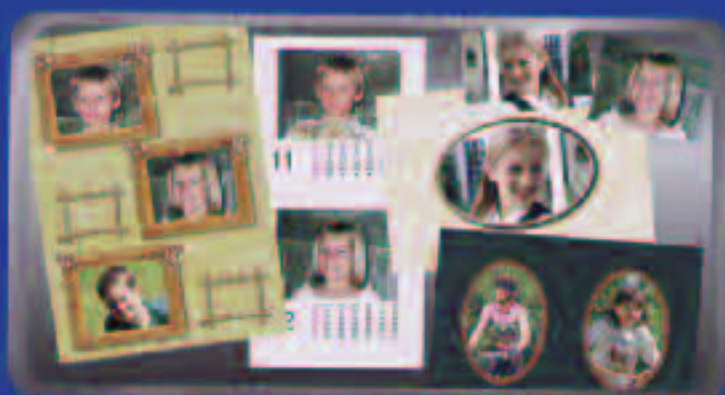
FD, MO, ZIP



Digital
still camera
(PCMCIA Card)



CD-R



Standard print, D print, Index print, Q File print,
Package print, Calendar, Passport photo, Greeting card...

High Capacity

High capacity through the world's fastest high-resolution film scanner, hybrid array line print heads, and parallel paper transportation.

Processing Capacity

(Maximum prints)

5" x 3.5" approx. **1800** prints/hr.

Easy Operation

Easy-to-use touch-screen with one-touch hyper color manipulation system, all-in-one ECOJET chemical cartridges, and leader-less film processing. Easy for inexperienced operators to use.

Quick Process

Fastest processing speed in the world. QD-21 provides one-stop photo-finishing center in any store.

Film Process Time :

Dry to Dry **4 min. 22 sec.**

Paper Process Time :

Dry to Dry **1 min. 19 sec.**

Multi-size Print Capability

Wide variety templates available.
Output image size up to 303.5mm x 465mm
(Maximum print size 315mm x 465mm)

Dry Operation

New advances in the Konica ECOJET chemical system. The all-in-one single ECOJET cartridge enables completely dry operation. No unpleasant chemical odors in the shop or office.

Compact Footprint

Installs in only 1.65m². Space-saving design fits in tighter spaces.

Network Print Capability

Enables disk-write services, and Internet upload services media print services from external PC image sources. Allows complicated image editing to be done on networked PC.

Konica proposes new solutions

New Concept Minilab with Windows™

The minilab that evolves with computer technologies

Konica **QD-21** system



Specifications and design of QD-21 main unit is subject to change without notice.
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Specifications QD-21 System

Basic System Configuration

Film processor	QDF-32U(UL standard) / T(CE standard & others)
Printer processor	QDP-1500U(UL standard) / T(CE standard & others)
Spec requirement	Approx. 1.65m ²
Dimensions	QDF-32U / T : 455 (L) x 790 (W) x 1180 (H) mm QDP-1500U / T : 1805 (L) x 790 (W) x 1500 (H) mm
Weight	QDF-32U / T : approx. 100 kg (without solution) QDP-1500U / T : approx. 550 kg (without solution)
Electrical capacity	QDF-32U / T Single-phase 200V AC to 240V AC 2.4 KW QDP-1500U / T QDP-1500U : Single-phase 200V AC to 240V AC and 120V AC 7.0 KW QDP-1500T : Single-phase 200V AC to 240V AC 7.0 KW

Printer Processor QDP-1500 U / T

Film scanner	Applicable films : 135F / H / P, IX240(APS), 110, 126 Carrier types (Standard) : Auto negative carrier for 135 size (Options) : Auto negative carrier for 135 / IX240 (APS) : Manual negative carrier for 135, 110, 126 size Resolution : Normal mode : 1024x1536 pixels (4 base) (135F) High resolution mode : 2048x3072 pixels (16 base) Scanning speed : Normal mode : approx. 0.8 sec. (135F) High resolution mode : approx. 2.0 sec. Light source : DC 24V 250W
Recommended flatbed scanner	Resolution : 300 dpi (main) x 600 dpi (sub) (optional)
PCMCIA card reader	Card type : PCMCIA card (type I, II, III), CompactFlash, SmartMedia, Miniature Card

CPU	K-6 266 MHz
Main memory	128MB
Monitor	15" touch screen monitor
FDD	2 mode
CD-ROM drive	x 32
HDD	3.2 G bytes

Exposure method	Digital exposure using LED and VFPH
Paper width (mm)	82, 89, 102, 127, 152, 165, 178, 203, 254, 279, 297, 315 (up to 127 width : dual magazine and dual transportation)
Maximum exposed width	303.5 mm
Maximum exposed length	465 mm
Paper type	Konica QA paper - Type A7
Output resolution	300dpi
Gradations	Input : 256 levels, Output : 4096 levels
Printing capacity (prints)	< Maximum output > 127mm x 89mm (5" X 3.5") : approx. 1800 prints / hr. 102mm x 152mm (4" X 6") : approx. 1180 prints / hr. < Actual printing capacity > 127mm x 89mm (5" X 3.5") : approx. 900 prints / hr. 102mm x 152mm (4" X 6") : approx. 700 prints / hr.
Operating system	Windows NT 4.0
Backprinter	Built-in 80 character (two-line) back printer (2 units)
Paper magazine	2 pieces of 127mm width x 175m magazine (standard) 1 piece of 315mm width x 175m magazine (standard)

Processing method	Roller transport
Processing speed	1800 mm / min.
Replenishment	Konica ECOJET HQA-P
Processing time	P1-P3 : 52 sec. (dry to dry : 79 sec.)
Processing tank volume	P1 : 6L, P2 : 6L, P3 : 3L
Water supply	Variable interval control, using bellows pumps Water tank volume : approx. 7L Built-in evaporation compensation function
Overflow tank	2 tanks volume : approx. 6 L x 2
Operating room temperature	Should be 30°C or below Temperature adjustment is performed when liquid temperature in processing tanks falls below 20°C.

Film Processor QDF-32U / T

Processing method	135 film : Self-support transporting without short leader IX240(APS), 110 : Short leader transport
Processing speed	Approx. 700 mm / sec.
Film type	135, IX240(APS), 110
Processing capacity	135 - 24 exp. : 32 rolls / hr. IX 240(APS)-25 exp. : 27 rolls / hr. 110 - 24 exp. : 34 rolls / hr.
Processing time	N1 - N4 : 3 min. 38 sec. (dry to dry : 4 min. 22 sec.)
Processing tank volume	N1 : 4L, N2 : 2L, N3 : 2Lx2, N4 : 2Lx2
Replenishment	Konica ECOJET HQA-N
Water supply	Variable interval control, using bellows pumps Water tank volume : approx. 10L Built-in evaporation compensation function
Overflow tank	2 tanks (UL standard) 1 tank (CE standard & others)
Operating room temperature	Should be 30°C or below Temperature adjustment is performed when liquid temperature in processing tanks falls below 20°C.

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