engineering innovations
worldwide

apollo
modular pick & place quad handler

Cutting-edge device handler

Quad handler with superior energy efficiency, ultimate temperature performance, unmatched reliability, and effortless operation.

Typical use cases

+ ultimate thermal performance & accuracy
+ high volume / multisite engineering
+ low & medium volume production
+ high volume production for test times > 5s with apollo super soak

Productivity

+ throughput up to 2,800 UPH at 4s test time (4s soak)
+ index time 4 devices: 0.85s

Flexibility

+ typical devices: QFP, QFN, SO, SOT, BGA etc.
+ contactsite pitch adapted via kit design, e.g. 57,15 x 63,5 mm, 60 x 60 mm, 40 x 60 mm etc.
+ flexible I / O module configurations, AMR/AGV ready
+ tool less kit changeover < 5 min
+ single site (x1), dual (x2) or quad site (x4) contacting

CE DIN ISO 9001 UK CA esmo semicon GERMAN ENGINEERING GLOBAL SOLUTIONS

apollo device handler technical specifications

System + Performance

1

single (x1), dual (x2) or quad site (x4) contacting

throughput 2800 UPH @ 4s test time (4s soak)

index time 4 devices: 0.85s

reuse of existing equipment like loadboards

automatic CUH lock

high volume production for test times > 5s
with apollo super soak

2

23.8” multi touch panel | easy to use, intuitive HMI

Thermal performance | temperature range

min. plunger temperature:
–80 °C / –112 °F with LN2 heat exchanger

max. plunger temp.: **+225 °C / +437 °F**
stability: ±0.5 °C / ±0.9 °F longtime (heatsink)

initial heat up time: 1.5 min
from +25 °C / 77 °F to +175 °C / 347 °F plunger temp.

maximum thermal performance with esmo sockets

special power dissipation / AI ATC

Device specifications + kit changeover

typical packages:
QFP, QFN, SO, SOT, BGA etc.

2.5 mm x 2.5 mm x 0.5 mm up to
125 mm x 120 mm x 10 mm (max. JEDEC tray size)

contactsite pitch adapted via kit design,
e.g. 57,15 x 63,5 mm, 60 x 60 mm, 40 x 60 mm
(and many more)

3

tool less kit changeover < 5 min

automatic parameter transfer via RFID tags

Input | output options

4

JEDEC tray (max. capacity 22 pcs.)
tube, tape, bowl, magazine planned

supports continuous load during operation

bin configuration free, Pin1 orientation free

Interfaces

RS232 (TCP/IP | TTL upon request | GPIB optional)

Facility requirements

electric:
EU: 400V / 16A / 50Hz 3Ph+N+PE (CEE 16A)
US: 208V / 30A / 60Hz 3Ph+N+PE (NEMA L21-30P)

pneumatic:
pressurized air, dry and oilfree, min. 6 bar / 87 psi (rel.)
max. consumption 350 l / min (@ TriTemp operation)

vacuum: 200 mbar / 2.9 psi (abs.)
LN2: 1.5–4.0 bar / 21.8–59.0 psi, consumption: 8 l / h

Additional options

Vaccuum pump | Air dryer | Ionizer | Code reader

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