

DATA SHEET

Environmental Chambers for Universal Testing Machines UTM



Environmental chamber for Universal Testing Machines UTM-130, 79-PV70E32

General description

IPC Global's environmental chambers use a high quality mechanical refrigeration system and superior insulation technologies to enable users to analyze materials' properties at real-life working temperatures (up to -50 to 80/100° C) for extended periods without the need of LN₂. High accuracy and total control over temperature ramps and dwells are achieved using the Programmable Digital Controller enabling users to easily perform complex test e.g. Thermal Stress Restrained Specimen Test (TSRST).

The **Environmental chamber** can be used as part of your **Superpave performance based testing** program.

Main features

- Closed-loop PID temperature controller
- Four access port (models for UTM-130), two access ports (model for UTM-30)
- Stainless steel AISI 304, 18/10 heavy duty construction
- Triple glazed, argon filled, Lo glass door
- Defrost system and interior lightning
- Fan forced ventilation
- Ergonomic design provides easy access to chamber

Additional features for extended range models only:

- Programmable digital controller - PID tuning, temperature ramps and dwells, auto-tuning, selectable sample time
- Extended range maximum cooling rate > -50°C/hour (dependent on thermal mass within chamber)
- Extended range programmable gradient of -20°C/hour with ramp control
- Fully adjustable temperature probe for greater accuracy

Specifications

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Environmental chambers for UTM-130 and UTM-130XL

Models	79-PV70E32 Extended range	79-PV70E42	79-PV70E52 Extended range
Compatible UTMs	UTM-130 79-PV70C05 79-PV70C06	UTM-130 79-PV70C05 79-PV70C06	UTM-130XL 79-PV70C15 79-PV70C16
Temperature range	-50 to +100°C	-25 to +70°C	-40 to +100°C
Temperature gradient	-20°C/hour with ramp control		-20°C/hour with ramp control
Mounted on wheels	Yes	Yes	Yes
Power rating W	4000	4000	4000
Dimensions (w x d x h) mm	580 x 1150 x 1750	580 x 1150 x 1750	960 x 1700 x 1800
Weight (approx.) kg	250	210	300

Environmental chambers for UTM-30

Models	79-PV70E12	79-PV70E22 Extended range
Compatible UTMs	UTM-30 79-PV70B12 79-PV70B02	UTM-30 79-PV70B12 79-PV70B02
Temperature range	-25 to +70°C	-50 to +80°C
Temperature gradient	-	-20°C/hour with ramp control
Mounted on wheels	No	No
Power rating W	1700	5000
Dimensions (w x d x h) mm	920 X 905 X 1800	920 X 835 X 1850
Weight (approx.) kg	220	350

Environmental chambers for UTM-16P

Model	79-PV70E02
Compatible UTMs	UTM-16P 79-PV70A02 79-PV70A12 79-PV70A14
Temperature range	-25 to +60° C
Temperature gradient	-
Mounted on wheels	No
Power rating W	1800
Dimensions (w x d x h) mm	710 x 805 x 2985
Weight (approx.) kg	170

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Environmental chambers fitted with UTM-30, 79-PV70E12



Environmental chambers fitted with UTM-16P, 79-PV70E02

Products

79-PV70E02

Environmental chamber for servo-pneumatic testing machine, -25°C to +60°C, 110-230V/50-60Hz/1Ph

79-PV70E12

Environmental chamber for UTM-30 servo-hydraulic machine, -25°C to +70°C, 110-230V/50-60Hz/1Ph

79-PV70E22

High performance environmental chamber for UTM-30 servo-hydraulic machine, -50°C to +80°C. 400V/50Hz/3ph, 208-240V/60Hz/3ph

79-PV70E32

High performance environmental chamber for UTM-130 servo-hydraulic machine, -50°C to +100°C. 400V/50Hz/3ph, 208-240V/60Hz/3ph

79-PV70E42

Environmental chamber for UTM-130, -25 to +60°C. 110-240V/50-60Hz/1ph

79-PV70E52

High performance environmental chamber for UTM-130XL servo-hydraulic machine, -50°C to +100°C. 400V/50Hz/3ph, 208-

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240V/60Hz/3ph



Accessories and consumables

79-PV70116

Temperature measuring kit (-50 +100°C), including two probes