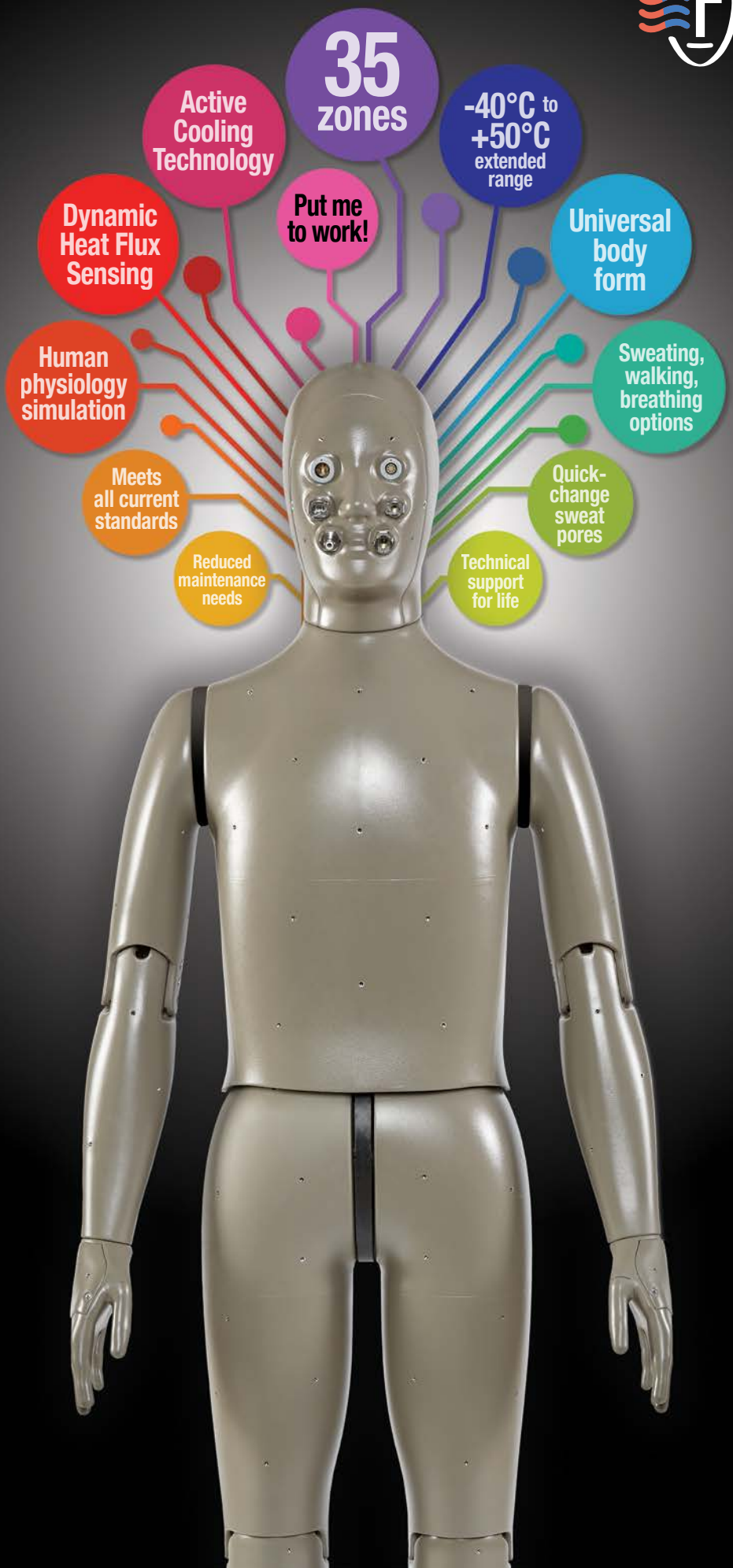
Thermetrics



THE GENIUS OF ANDI

The world's most advanced thermal manikin.

The sophisticated properties and capabilities of today's technical textiles take performance apparel far beyond the simple halcyon days of "wash-and-wear". Traditional testing methods and equipment are no longer adequate for the evaluation of these new fabrics.

ANDI answers the call.
The 35-zone ANDI sweating thermal manikin is the key to advanced thermal comfort research. With exclusive features such as Active Cooling and Dynamic Heatflux Sensing, ANDI has unrivaled abilities to measure both positive and negative heatflux (heat loss and heat gain) and to respond to changing environmental conditions with unprecedented speed and accuracy.

- ***Need to evaluate heated apparel, blankets, or seats?*** ANDI will measure the transmitted heat in W/m2 and the resulting impact on perceived thermal comfort.
- ***Need to understand how a garment performs in high ambient temperatures or under extreme solar loads?*** ANDI will generate the data you're looking for, without the risk of overheating or losing control.
- ***Need to quantify the cool-to-touch or warm-to-touch temperature buffering effect in fabrics containing Phase Change Materials?*** Only ANDI has the sensitivity to detect and calculate the transient properties of PCM textiles.

THE GENIUS OF ANDI

ANDI expands what's possible in simulating human physiology.

ANDI does everything a traditional thermal manikin can do, but this high-tech marvel goes far beyond what's been possible in the past. This versatile research tool takes the simulation of human physiology to a new level of sophistication.

- **Rapid Dynamic Heat Flux Sensing** can measure even small transient events, which humans can feel but manikins couldn't measure - until ANDI.
- **Active Cooling technology** simulates the mass of a human without the weight penalty and expands ANDI's temperature range (-40˚C to +50˚C)* for testing in the same range of conditions where garments are worn.
- **ManikinPC** (Manikin Physiology Control and Predictive Comfort) software simulates the human thermoregulatory system and provides metrics for thermal comfort and thermal sensation.
- **ANDI accurately measures** the complex thermal interactions between apparel and hot environments, yielding new insights for garment researchers.
- **Humans sweat. So does ANDI,** with precision sweat control and new quick-change sweat pores that minimize maintenance time.
- **Next-generation zone controllers** and robust components improve system performance, reliability, and uptime.

RANGE / PERFORMANCE / ACCURACY
-40°C to +50°C operating range (**with extended range option*)
± 0.1°C temperature measurement
0 to 100% R.H. including condensation
± 3% relative humidity measurement
1000 W/m² maximum power output
Continuous heat removal capacity 350 W/m²
Sweating system: 0–1000 ml/hr
SIZE / WEIGHT / POWER
Manikin body form: Universal Male
Height: 5'10" (178.5cm)
Weight: 77 lbs (35 kg)
Power Requirements: 208-265 VAC, 50/60Hz, single-phase.

Thermetrics

4220 24th Ave. West
Seattle, WA 98199
USA
Phone: 1-206-456-9119
www.thermetrics.com