THERMAL DISPERSION ELECTRONIC DUCT AVERAGING AIRFLOW TRANSMITTER KAMP5K SERIES



DESCRIPTION

The Kele model KAMP5K is a highly accurate thermal dispersion airflow and temperature measuring probe. Multiple velocity and temperature points on one or more probes installed in the duct or plenum are averaged to arrive at air measurements.

The KAMP5K is capable of measuring a velocity range from 0 to 5,000 FPM and displaying the flow and temperature at each sensing point. Within each low-pressure drop airfoil-shaped probe are up to 8 moisture-resistant flex sensors. Both velocity and temperature are measured by each flex sensor thermistor pair. The flex sensor pair is protected from the elements with a thin conformal coating. Trouble-free performance is assured by laser-etched, micro welded and hermetically sealed flex sensor connection points. The highest accuracy over the entire range of air flows results from probe sensing elements that are factory tested and calibrated at 20 points.

FEATURES

- Self-diagnostics utilizing artificial intelligence
- BACNET and analog output standard
- Lowest power consumption thermal dispersion device available
- Tool-free one-touch setup through surface membrane lahel
- Stainless Steel mounting hardware



KAMP5K shown w/remote only **Probe only & Combination**

Typical Systems Include:

Microprocessor Primary (Combined w/probe or remote) Multi-Sensor Averaging Duct Probe (may need >1) Each probe has multiple sensors per probe

- Standard cabling, no proprietary cables
- Third-party verified FCC, UL, BTL, AMCA, NIST and ISO
- Airfoil shaped acid-etch clear anodized sensing probes featuring lower pressure drop and less noise
- Highest density thermal dispersion sensing array up to 128 sensing points

SPECIFICATIONS
Power.

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Power	24VAC, 15VA (16 probes &	Ambient RH	0-99% Non-condensing
	128 sensors)	Enclosures	NEMA-1, ABS plastic, UL94-5VA
Sensor	Thermal Dispersion (TD),	10	NEMA-4 (-N4 Option)
	dual thermistors	Probe	Aluminum & ABS plastic,
	128 sensors max, 16 probes max		UL 94 flame rated mounting
Accuracy	±3% of total air flow		2.25" (57mm) TD probe hole
TD Sensor	±2% of reading, ±0.25% repeatability	1-CTLR	Tab w/ 4 screw holes
Temperature	±0.1°F (0.06°C)	1-TD Probe	Tab w/4 screw holes & 4 opposite
Velocity Range	0 to 5,000 FPS (0 to 25 mps) max		duct
Output	2-Sourcing, 4-20mA @	Opt. Remote	Tab w/4 screw holes
	500Ω impedance	Termination	Screw terminals in 5.8" x 6.5"
FPS or CFM	Set by main processor		enclosure
	FPS (MPS) = $0-5,000$, or	Primary	4-PWR, 4-MSTP, 6-Analog,
	CFM (LPS) = FPS (MPS) x W x H	,	4-ancilary probes
Temperature Range	Set by main processor	TD Probe	4-PWR, 4-ancilary probes
	-20 to 120°F (-29 to 49°C)	RMT. Display	4-PWR, 4-ancilary (Anc.) probes
Communication	Proprietary RS-485 between probes	Wire	Two TSP, 18 AWG, low capacitance
BAS Protocol	BACnet MSTP, RS-485 to BAS	Dimensions	5.8"W x 6.5"H x 3.8"D,
Controls	,		(147 x 165 x 96 mm)
Primary	5 buttons for menu set-up	Probe Length	8" to 120," actual duct width + 0.5"
Remote	7 buttons for menu set-up,	Probe Diameter	2.13" W Airfoil x 0.84"H,
16	500ft CBL max		2.25" MNTG hole
Indication	2-line, 16-character alphanumeric	Weight	12 lbs (5.4 kg) w/CTLR and
Primary	LCD Green backlit, w/IP or SI units		2 TD probes
Remote	Wired, LED Green, 24VAC, 1VA	Approvals	FCC, UL, BTL, AMCA, RoHS,
	Wireless, LED, 24VAC, 1VA,		USGBC
	200' open air	Warranty	5 years

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Sensor

Primary

Ambient Temperature

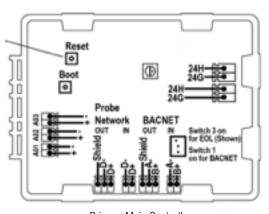
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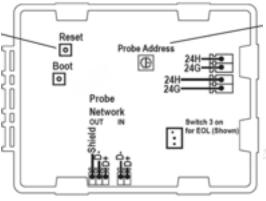
WIRING

Limits:

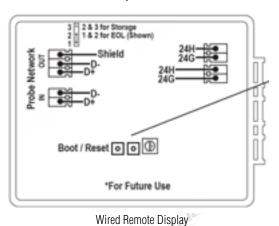
1 to 4 probes in rectangle ducts 120"W x 120"H
Between 2 and 8 sensors per probe per order
128 sensors max, 16 probes max
Twin 4-20mA sourcing outputs standard
Power = 24VAC, 15VA for any size system
Proprietary RS-485 addresses -16 max (0-F)
Proprietary RS-485 cable max 500 feet
Wireless remote display, open air 200' max
Round and oval ducts possible w/bracket



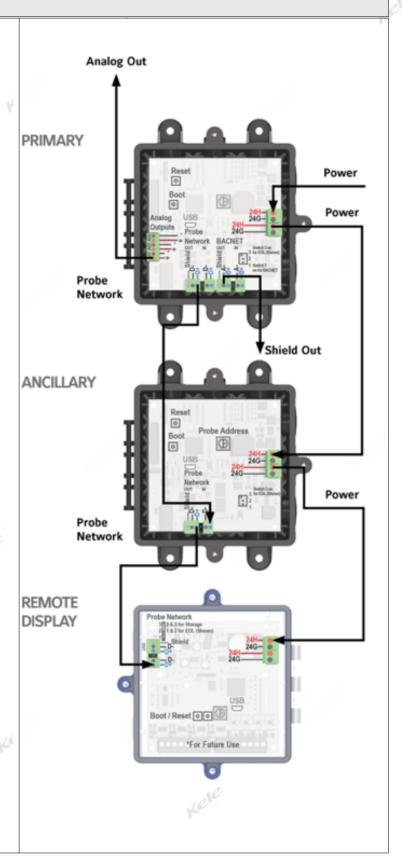
Primary Main Controller Reset = Resets Power



Ancillary TD Sensor Probe



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ORDERING INFORMATION

KAMP5K	Main Proce	ain Processor w/Thermal Dispersion probes sized for the duct W x H			
	-ww.w =	ww.w = Actual Duct Probe Width in inches (any value between 8.0" to 120.0" in 0.1" increments)			
		- hh.h hh.h = Duct Probe Height in Inches (any value between 8.0" to 120.0" in 0.1" increments)			
			Opt.	Options for the TD Sensor Probe & Enclosure, (Multiple opt. list alphabetically)	
			-DSB	Damper Stand-Off Bracket for TD Probe	
			-FSDMB	Far Side Duct Mounting Bracket for TD sensor probe mounting inside the duct	
			- N4	NEMA 4 KAMP5K Enclosure	
			- RDB	Round Duct Bracket for the KAMP5K Enclosure	
Example:					
KAMP5K	-19.5	-19.5	-DSB-N4	Main Processor w/Thermal Dispersion sensor w/Two 19.5" probes, w/DMPR BKT & NEMA-4 Encl.	

RELATED PRODUCTS

DCPA-1.2 Power supply, 120 VAC IN to 24 VAC/24 VDC OUT **DCP-1.5-W** Power supply, 24 VAC IN to 24 VDC OUT

ACCESSORIES

DMPR-RA002 Remote 5-button controller w/display
RMD Remote 7-button wired display
Remote 7-button wireless display

DMPR-KA002 SS damper stand-off bracket for TD sensor probe

FSDMB Far side duct mounting bracket for TD sensor probe mounting inside the duct

RDB Round duct bracket for the KAMP5K or TDP probe enclosure

N4-PLK 4 rubber plug kit to make NEMA-1 enclosure into a NEMA-4 er

N4-PLK
 4 rubber plug kit to make NEMA-1 enclosure into a NEMA-4 enclosure
 691-K0A
 120/24 VAC, 40VA transformer hub mount (9 sensor system)
 691-K1A
 120/24 VAC, 100VA transformer hub mount (16 sensor system)

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