

# NK Technologies Voltage Transducers

## AC Volts

- TRMS measurement
- Loop-powered output
- Input and output isolation
- DIN rail mount


**VTR**


### ORDERING INFORMATION

VTR1-420-24L-DIN	0-120V in	4-20mA out	24V loop powered
VTR2-420-24L-DIN	0-150V in	4-20mA out	24V loop powered
VTR3-420-24L-DIN	0-240V in	4-20mA out	24V loop powered
VTR4-420-24L-DIN	0-480V in	4-20mA out	24V loop powered
VTR5-420-24L-DIN	0-500V in	4-20mA out	24V loop powered
VTR6-420-24L-DIN	0-600V in	4-20mA out	24V loop powered

### VTR SPECIFICATIONS

Power Supply:	24 V DC loop-powered (12–40 VDC)
Input:	120 V, 150 V, 240 V, 480 V, 500 V, 600 V
Output:	4–20 mA proportional; capped at 24 mA max.
Load Impedance:	<500Ω
Input Maximum:	130% of range
Response Time:	250 ms (to 90% value)
Accuracy:	1.0% FS at 60 Hz, 2.5% at 50 Hz (10–100% of range)
Linearity:	<0.5%
Isolation Voltage:	UL listed to 2500 VAC, tested to 5 kV
Frequency Range:	40–100 Hz
Mounting:	DIN rail compatible
Case:	UL94 V0 flammability rated; noncorrosive thermoplastic
Environmental:	-22 to 140°F (-30 to 60°C), <95% RH, non-condensing
Ripple:	<1% (peak to peak)
Listings:	UL508 Industrial Control Equipment (USA & Canada), CE
Dimensions:	3.53" x 2.4" x 1.4" (90x61x36mm)

## DC Volts

- Input up to 600V, in 6 ranges
- V or mA output
- Input and output isolation
- DIN rail mount


**VTD**


### ORDERING INFORMATION

VTD0-005-24U-DIN	0-15V in	0-5V out	24V AC/DC supply
VTD0-010-24U-DIN	0-15V in	0-10V out	24V AC/DC supply
VTD0-420-24U-DIN	0-15V in	4-20mA out	24V AC/DC supply
VTD1-005-24U-DIN	0-25V in	0-5V out	24V AC/DC supply
VTD1-010-24U-DIN	0-25V in	0-10V out	24V AC/DC supply
VTD1-420-24U-DIN	0-25V in	4-20mA out	24V AC/DC supply
VTD2-005-24U-DIN	0-50V in	0-5V out	24V AC/DC supply
VTD2-010-24U-DIN	0-50V in	0-10V out	24V AC/DC supply
VTD2-420-24U-DIN	0-50V in	4-20mA out	24V AC/DC supply
VTD3-005-24U-DIN	0-150V in	0-5V out	24V AC/DC supply
VTD3-010-24U-DIN	0-150V in	0-10V out	24V AC/DC supply
VTD3-420-24U-DIN	0-150V in	4-20mA out	24V AC/DC supply
VTD4-005-24U-DIN	0-300V in	0-5V out	24V AC/DC supply
VTD4-010-24U-DIN	0-300V in	0-10V out	24V AC/DC supply
VTD4-420-24U-DIN	0-300V in	4-20mA out	24V AC/DC supply
VTD5-005-24U-DIN	0-600V in	0-5V out	24V AC/DC supply
VTD5-010-24U-DIN	0-600V in	0-10V out	24V AC/DC supply
VTD5-420-24U-DIN	0-600V in	4-20mA out	24V AC/DC supply

### VTD SPECIFICATIONS

Power Supply:	24 V AC/DC (20–45 DC, 22–38 VAC)
Input:	15 V, 25 V, 50 V, 150 V, 300 V, 600 VDC
Output:	4–20 mA (capped at 24 mA max.) 0–5 VDC (capped at 5.75 VDC), 0–10 VDC (capped at 11.5 VDC)
Load Impedance:	4–20 mA: <500Ω; 0–5/10 VDC: >10kΩ
Response Time:	250 ms (to 90% value)
Accuracy:	<1%
Linearity:	<0.5%
Isolation Voltage:	UL listed to 2500 VAC, tested to 5 kV
Frequency Range:	DC
Mounting:	DIN rail compatible
Case:	UL94 V0 flammability rated; noncorrosive thermoplastic
Ripple:	<1% (peak to peak)
Environmental:	-4 to 122°F (-20 to 50°C), <95% RH, non-condensing
Listings:	UL508 Industrial Control Equipment (USA & Canada), CE
Dimensions:	3.53" x 2.4" x 1.4" (90x61x36mm)

## High Voltage AC/DC

- Input up to 1200V AC/DC
- Externally powered from 24V AC/DC
- DIN rail or panel mount
- Input/Output/Power isolation


**VTU**


### ORDERING INFORMATION

VTU8-005-24U-OS	0-800V in	0-5V out	24V AC/DC supply
VTU8-010-24U-OS	0-800V in	0-10V out	24V AC/DC supply
VTU8-420-24U-OS	0-800V in	4-20mA out	24V AC/DC supply
VTU10-005-24U-OS	0-1000V in	0-5V out	24V AC/DC supply
VTU10-010-24U-OS	0-1000V in	0-10V out	24V AC/DC supply
VTU10-420-24U-OS	0-1000V in	4-20mA out	24V AC/DC supply
VTU12-005-24U-OS	0-1200V in	0-5V out	24V AC/DC supply
VTU12-010-24U-OS	0-1200V in	0-10V out	24V AC/DC supply
VTU12-420-24U-OS	0-1200V in	4-20mA out	24V AC/DC supply

### VTU SPECIFICATIONS

Power Supply:	24 V AC/DC (22–26 VAC or DC), <4 VA
Output:	4–20mA, 0–5 VDC, 0–10 VDC
Load Impedance:	4–20mA: <400Ω; 0–5/10 VDC: >100Ω
Input:	0–800, 1000 or 1200 V, AC or DC
Response Time:	100 ms
Accuracy:	<1% FS
Isolation Voltage:	Tested to 5000 VAC primary to output. Power supply isolated from primary and output circuits
Frequency Range:	0–400 Hz
Mounting:	DIN rail or panel mounted
Case:	UL94 V0 flammability rated; noncorrosive thermoplastic
Environmental:	-4° to 122°F (-20° to 50°C), <95% RH, non-condensing
Listings:	UL508 Industrial Control Equipment (USA & Canada), CE
Dimensions:	4.39" x 4.37" x 2.6" (111.5x111x66mm)