

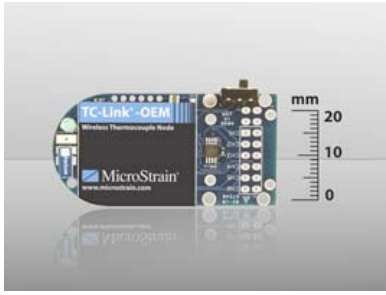


Wireless Thermocouple Sensors Comparison

Specifications			
Model	TC-Link® 6 Channel	TC-Link® 1 Channel	TC-Link® OEM
Thermocouple inputs supported	Software selectable: Type J, K, R, S, T, E, B, N six input channels, one ambient CJC channel Optional internal relative humidity sensor	Software selectable: Type J, K, R, S, T, E, B, N one input channel, one ambient CJC channel	Software selectable: Type J, K, R, S, T, E, B, N six input channels, one ambient CJC channel
Standard thermocouple measurement range	J -210 to 760°C K -200 to 1372°C R -50 to 1664°C S -50 to 1664°C T -200 to 400°C E -200 to 1000°C B 250 to 1820°C N -200 to 1300°C	J -210 to 760°C K -200 to 1372°C R -50 to 1664°C S -50 to 1664°C T -200 to 400°C E -200 to 1000°C B 250 to 1820°C N -200 to 1300°C	J -210 to 760°C K -200 to 1372°C R -50 to 1664°C S -50 to 1664°C T -200 to 400°C E -200 to 1000°C B 250 to 1820°C N -200 to 1300°C
Temperature measurement accuracy	±0.1% full scale or ±2.0°C whichever is greater (does not include errors due to TC wire or transducer)	±0.1% full scale or ±2.0°C whichever is greater (does not include errors due to TC wire or transducer)	±0.1% full scale or ±2.0°C whichever is greater (does not include errors due to TC wire or transducer)
Temperature repeatability	±0.1°C (does not include errors due to TC wire or transducer)	±0.1°C (does not include errors due to TC wire or transducer)	±0.1°C (does not include errors due to TC wire or transducer)
Temperature resolution	0.0625°C	0.0625°C	0.0625°C
Cold junction compensation range	-20 to 85°C	-20 to 85°C	-20 to 85°C
Thermocouple connector	Type 1 standard mini (SM) connectors for flat pin TC inputs	Type 1 standard mini (SM) connectors for flat pin TC inputs	Direct solder connection
Optional relative humidity (RH) sensor	Range 0 to 100% RH, accuracy ± 2% RH (from 10 to 90% RH), repeatability ± 0.1% RH	-	-
Analog to digital (A/D) converter	24 bit Delta-Sigma A/D	24 bit Delta-Sigma A/D	24 bit Delta-Sigma A/D
Sample rate	Programmable from 2 samples/second to 1 sample/17 minutes for datalogging or LDC modes	Programmable from 2 samples/second to 1 sample/17 minutes for datalogging or LDC modes	Programmable from 2 samples/second to 1 sample/17 minutes for datalogging or LDC modes
Datalogging mode	Log up to 45,000 data sets (up to 360,000 data points)	Log up to 90,000 data sets (up to 630,000 data points)	Log up to 90,000 data sets (up to 630,000 data points)
Nodes per base station	Supports up to 100 nodes per base station	Supports up to 100 nodes per base station	Supports up to 100 nodes per base station
Sample rate stability	Datalogging and LDC modes ±25 ppm	Datalogging and LDC modes ±25 ppm	Datalogging and LDC modes ±25 ppm

Model	TC-Link® 6 Channel	TC-Link® 1 Channel	TC-Link® OEM
Radio frequency (RF) transceiver carrier	2.4 GHz, direct sequence spread spectrum, license free worldwide (2.405 to 2.480 GHz) - 16 channels, radiated power 0 dBm (1mW)	2.4 GHz, direct sequence spread spectrum, license free worldwide (2.405 to 2.480 GHz) - 16 channels, radiated power 0 dBm (1mW)	2.4 GHz, direct sequence spread spectrum, license free worldwide (2.405 to 2.480 GHz) - 16 channels, radiated power 0 dBm (1mW)
Range for bi-directional RF link	Up to 70 m line of sight, up to 100 m with high gain antenna on base station	Up to 70 m line of sight, up to 100 m with high gain antenna on base station	Up to 70 m line of sight, up to 100 m with high gain antenna on base station
RF data packet standard	IEEE 802.15.4, open communication architecture	IEEE 802.15.4, open communication architecture	IEEE 802.15.4, open communication architecture
PC communications	115,200 baud over USB	115,200 baud over USB	115,200 baud over USB
Power supply	-	-	External power from 3.2 to 9 volts
Internal li-ion battery	Rechargeable 3.7 volt lithium ion, 650 mAh capacity. Customer may also supply external power from 3.2 to 9 volts	550 mAh, high capacity, lithium-ion primary battery	-
Power consumption (battery life)	2 samples per second - 0.8 mA (1 month) 1 sample per second - 0.48 mA (2 months) 3 samples per minute - 0.1 mA (8 months) 1 sample per minute - 0.09 mA (10 months)	2 samples per second - 0.8 mA (23 days) 1 sample per second - 0.48 mA (1.5 months) 3 samples per minute - 0.1 mA (6 months) 1 sample per minute - 0.09 mA (7 months, 13 days)	2 samples per second - 0.8 mA 1 sample per second - 0.48 mA 3 samples per minute - 0.1 mA 1 sample per minute - 0.09 mA
Operating temperature	-20°C to +60°C with standard internal battery and enclosure, extended temperature range optional with custom battery and enclosure. -40°C to +85°C for electronics only	-20°C to +60°C with standard internal battery and enclosure, extended temperature range optional with custom battery and enclosure. -40°C to +85°C for electronics only	-40°C to +85°C (electronics only, cjc limited to -20 to 85°C)
Maximum acceleration limit	500 g standard (high g option available)	500 g standard (high g option available)	500 g standard (high g option available)
Dimensions	111 mm x 62 mm x 28 mm (enclosure) 77 mm x 62 mm x 18 mm (circuit board assembly only)	54.8 mm x 29.5 mm x 15.5 mm (with enclosure) 50.3 mm x 25.4 mm x 5.9 mm (circuit board assembly only)	50.3 mm x 25.4 mm x 5.9 mm (board only) 57.7 mm x 25.4 mm x 9.1 mm (board with right angle, external pin connector)
Weight	116 grams (with enclosure) 33 grams (circuit board assembly only)	30.1 grams (with enclosure and battery) 4.7 grams (circuit board assembly only)	30.1 grams (with enclosure and battery) 4.7 grams (circuit board assembly only)
Enclosure material	ABS plastic	ABS plastic	
Software	Node Commander® Windows XP/Vista compatible	Node Commander® Windows XP/Vista compatible	Node Commander® Windows XP/Vista compatible
Compatible base stations	USB, RS-232, Analog, WSDA®, WSDA®-Base	USB, RS-232, Analog, WSDA®, WSDA®-Base	USB, RS-232, Analog, WSDA®, WSDA®-Base

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