PRODUCT SPECIFICATION LPT-B-SIH4 Transmitter

Digital (BACnet®) Transmitter with Electrochemical Silane (SiH4) Sensors

Dimensions: Size Weight		
ABS / Polycarbonate blend, water/dust tight, corrosion resistant (meets IPS4 standard with optional splash guard installed) Sensors: Type Life Span Approximately 2 years (application dependent) Gases Detected Silane Sensor Range 0 − 20 ppm standard 3-wire: VDC: 12-30 VDC, 3-Watts 4-wire: VAC: 12-27/AC, 3-VA Temperature −20°C to +45°C (-40°F to 113°F), -40°C (-40°F) with LCD heater option Humidity 15 to 90% non-condensing ILCD digital display, back lit, 128 X 64 pixel graphic Signal BACnet* MS/TP Relay One dry contact relay rated 2-amps @ 30∨ S.P.D.T. Audible Internal audible alarm (user controlled) Minimum Detection 1 ppm (with regular calibration maintenance of sensor) Repeatability < +/- 2% (with regular calibration maintenance of sensor) Accuracy +/- 0.3 ppm at STP at time of calibration maintenance of sensor) Accuracy +/- 0.3 ppm at STP at time of calibration maintenance of sensor) Sensitivity Drift < 2% signal loss / month (with regular calibration maintenance of sensor) Response Time <60 seconds T₂₀ Resolution Display resolution 0.1 ppm, sensor resolution 0.5 ppm Warm Up Time 5-minutes after power up (to full operation) Cross Sensitivity 502 5 ppm = 1, H25 5 ppm = 8, PH3 2, ppm = 2 Resolution Display resolution 17): 2007 Cess Sensor Mounting Heavier than air, 6" to 12" (15 cm to 30 cm) from the floor Monitoring Area CSA: (222 NO205-12 UL: UL508 (Edition 17): 2007 CE: BMC Directive 2004/108/EC, EN50270:2006, Type-1 & EN61010 FCC Listed by BTL		5.0" X 5.0" X 3.3" (127 mm x 127 mm x 84 mm) (dimensions with optional splash guard)
Life Span Approximately 2 years (application dependent) Gases Detected Silane Sensor Range 0 – 20 ppm standard 3-wire: VDC: 12-30 VDC, 3-Watts 4-wire: VAC: 12-27VAC, 3-VA Temperature -20°C to +45°C (-4°F to 113°F), -40°C (-40°F) with LCD heater option Humidity 15 to 90% non-condensing Indicators LCD digital display, back lit, 128 X 64 pixel graphic Signal BACnet® MS/TP Relay One dry contact relay rated 2-amps @ 30v S.P.D.T. Audible Internal audible alarm (user controlled) Minimum Detection 1 ppm (with regular calibration maintenance of sensor) Repeatability < +/- 29% (with regular calibration maintenance of sensor) Accuracy +/- 0.3 ppm at STP at time of calibration, +/- 0.8 ppm at STP across measurement range, at time of calibration + calibration gas error Sensitivity Drift < 29% signal loss / month (with regular calibration maintenance of sensor) Response Time <60 seconds T ₅₀ Resolution Display resolution 0.1 ppm, sensor resolution 0.5 ppm Warm Up Time 5-minutes after power up (to full operation) Forss Sensitivity S02 5 ppm = 1, H2S 5 ppm = 8, PH3 2 ppm = 2 Fusing Automatic resetting thermal overload fuse (reset capabilities to 500 times) Wiring 4-wire VAC/VDC, 16 awg, 4-conductor shielded network wiring (daisy chain) Sensor Mounting Heavier than air, 6" to 12" (15 cm to 30 cm) from the floor Monitoring Area CSA: C22.2 NO205-12 UI: ULS08 (Edition 17): 2007 CE: EMC Directive 2004/108/EC, EN50270:2006, Type-1 & EN61010 ECC Listed by BTL	Construction	
Sensor Range 0 – 20 ppm standard 3-wire: VDC: 12-30 VDC, 3-Watts 4-wire: VAC: 12-27VAC, 3-VA Temperature -20°C to +45°C (-4°F to 113°F), -40°C (-40°F) with LCD heater option Humidity 15 to 90% non-condensing Indicators LCD digital display, back lit, 128 X 64 pixel graphic Signal BAGnet® MS/TP Relay One dry contact relay rated 2-amps @ 30v S.P.D.T. Audible Internal audible alarm (user controlled) Minimum Detection 1 ppm (with regular calibration maintenance of sensor) Repeatability < +/- 2% (with regular calibration maintenance of sensor) Accuracy +/- 0.3 ppm at STP at time of calibration, +/- 0.8 ppm at STP across measurement range, at time of calibration + calibration pas error -2% signal loss / month (with regular calibration maintenance of sensor) Response Time <60 seconds T ₅₀ Resolution Display resolution 0.1 ppm, sensor resolution 0.5 ppm Warm Up Time -5-minutes after power up (to full operation) Cross Sensitivity 502 5 ppm = 1, H2S 5 ppm = 8, PH3 2 ppm = 2 Fusing Automatic resetting thermal overload fuse (reset capabilities to 500 times) Wiring 4-wire VAC/VDC, 16 awg, 4-conductor shielded network wiring (daisy chain) Sensor Mounting Heavier than air, 6" to 12" (15 cm to 30 cm) from the floor Monitoring Area CSA: C22.2 NO.205-12 UI: ULSOB (Edition 17): 2007 CE: EMC Directive 2004/108/EC, EN50270:2006, Type-1 & EN61010 ECC Listed by BTL		
3-wire: VDC: 12-30 VDC, 3-Watts 4-wire: VAC: 12-27VAC, 3-VA Temperature -20°C to +45°C (-4°F to 113°F), -40°C (-40°F) with LCD heater option Humidity 15 to 90% non-condensing Indicators LCD digital display, back lit, 128 X 64 pixel graphic Signal BACnet* MS/TP Relay One dry contact relay rated 2-amps @ 30v S.P.D.T. Audible Internal audible alarm (user controlled) Minimum Detection 1 ppm (with regular calibration maintenance of sensor) Repeatability <+/- 2% (with regular calibration maintenance of sensor) Accuracy +/- 0.3 ppm at STP at time of calibration, +/- 0.8 ppm at STP across measurement range, at time of calibration + calibration gas error Sensitivity Drift <20% signal loss / month (with regular calibration maintenance of sensor) Response Time 60 seconds T ₀ Oisplay resolution 0.1 ppm, sensor resolution 0.5 ppm Warm Up Time 5-minutes after power up (to full operation) Cross Sensitivity SO2 5 ppm = 1, H2S 5 ppm = 8, PH3 2 ppm = 2 Fusing Automatic resetting thermal overload fuse (reset capabilities to 500 times) Wiring 4-wire VAC/VDC, 16 awg, 4-conductor shielded network wiring (daisy chain) Heavier than air, 6" to 12" (15 cm to 30 cm) from the floor Monitoring Area CSA: C22.2 NO.205-12 UI: ULSO8 (Edition 17): 2007 CE: EMC Directive 2004/108/EC, EN50270.2006, Type-1 & EN61010 ECC Listed by BTL	Gases Detected	Silane
A-wire: VAC: 12-27VAC, 3-VA Temperature -20°C to +45°C (-4°F to 113°F), -40°C (-40°F) with LCD heater option Humidity 15 to 90% non-condensing Indicators LCD digital display, back lit, 128 X 64 pixel graphic Signal BACnet® MS/TP Relay One dry contact relay rated 2-amps @ 30v S.P.D.T. Audible Internal audible alarm (user controlled) Minimum Detection 1 ppm (with regular calibration maintenance of sensor) Repeatability < +/- 2% (with regular calibration maintenance of sensor) Accuracy +/- 0.3 ppm at STP at time of calibration, +/- 0.8 ppm at STP across measurement range, at time of calibration + calibration gas error Sensitivity Drift < 2% signal loss / month (with regular calibration maintenance of sensor) Response Time < 60 seconds T ₅₀ Resolution Display resolution 0.1 ppm, sensor resolution 0.5 ppm Warm Up Time 5-minutes after power up (to full operation) Cross Sensitivity SO2 5 ppm = 1, H2S 5 ppm = 8, PH3 2 ppm = 2 Fusing Automatic resetting thermal overload fuse (reset capabilities to 500 times) Wiring 4-wire VAC/VDC, 16 awg, 4-conductor shielded network wiring (daisy chain) Sensor Mounting Heavier than air, 6" to 12" (15 cm to 30 cm) from the floor Monitoring Area CSA: C22.2 NO.205-12 U: U.S08 (Edition 17): 2007 CE: EMC Directive 2004/108/EC, EN50270.2006, Type-1 & EN61010 FCC Listed by BTL	Sensor Range	0 – 20 ppm standard
Indicators LCD digital display, back lit, 128 X 64 pixel graphic	System Power	•
Indicators LCD digital display, back lit, 128 X 64 pixel graphic BACnet® MS/TP Relay One dry contact relay rated 2-amps @ 30v S.P.D.T. Audible Internal audible alarm (user controlled) Minimum Detection 1 ppm (with regular calibration maintenance of sensor) Repeatability < +/- 2% (with regular calibration maintenance of sensor) Accuracy +/- 0.3 ppm at STP at time of calibration, +/- 0.8 ppm at STP across measurement range, at time of calibration pas error Sensitivity Drift < 2% signal loss / month (with regular calibration maintenance of sensor) Response Time <60 seconds T ₅₀ Coss Sensitivity Display resolution 0.1 ppm, sensor resolution 0.5 ppm Warm Up Time 5-minutes after power up (to full operation) Cross Sensitivity SO2 5 ppm = 1, H2S 5 ppm = 8, PH3 2 ppm = 2 Fusing Automatic resetting thermal overload fuse (reset capabilities to 500 times) Wiring 4-wire VAC/VDC, 16 awg, 4-conductor shielded network wiring (daisy chain) Sensor Mounting Heavier than air, 6" to 12" (15 cm to 30 cm) from the floor Monitoring Area CSA: C22.2 NO.205-12 UL: UL508 (Edition 17): 2007 CE: EMC Directive 2004/108/EC, EN50270:2006, Type-1 & EN61010 FCC Listed by BTL	Temperature	-20°C to +45°C (-4°F to 113°F), -40°C (-40°F) with LCD heater option
BACnet® MS/TP Relay One dry contact relay rated 2-amps @ 30v S.P.D.T. Audible Internal audible alarm (user controlled) I ppm (with regular calibration maintenance of sensor) Repeatability < +/- 2% (with regular calibration maintenance of sensor) Accuracy +/- 0.3 ppm at STP at time of calibration, +/- 0.8 ppm at STP across measurement range, at time of calibration + calibration gas error Sensitivity Drift < 2% signal loss / month (with regular calibration maintenance of sensor) Response Time <60 seconds T ₉₀ Resolution Display resolution 0.1 ppm, sensor resolution 0.5 ppm Warm Up Time 5-minutes after power up (to full operation) Cross Sensitivity SO2 5 ppm = 1, H2S 5 ppm = 8, PH3 2 ppm = 2 Fusing Automatic resetting thermal overload fuse (reset capabilities to 500 times) Wiring 4-wire VAC/VDC, 16 awg, 4-conductor shielded network wiring (daisy chain) Sensor Mounting Heavier than air, 6" to 12" (15 cm to 30 cm) from the floor Monitoring Area CSA: C22.2 NO.205-12 UL: UL508 (Edition 17): 2007 CE: EMC Directive 2004/108/EC, EN50270:2006, Type-1 & EN61010 FCC Listed by BTL	Humidity	15 to 90% non-condensing
Relay One dry contact relay rated 2-amps @ 30v S.P.D.T. Audible Internal audible alarm (user controlled) Minimum Detection 1 ppm (with regular calibration maintenance of sensor) Repeatability < +/- 2% (with regular calibration maintenance of sensor) Accuracy +/- 0.3 ppm at STP at time of calibration, +/- 0.8 ppm at STP across measurement range, at time of calibration + calibration gas error Sensitivity Drift < 2% signal loss / month (with regular calibration maintenance of sensor) Response Time < 60 seconds T ₅₀ Resolution Display resolution 0.1 ppm, sensor resolution 0.5 ppm Warm Up Time 5-minutes after power up (to full operation) Cross Sensitivity SO2 5 ppm = 1, H2S 5 ppm = 8, PH3 2 ppm = 2 Fusing Automatic resetting thermal overload fuse (reset capabilities to 500 times) Wiring 4-wire VAC/VDC, 16 awg, 4-conductor shielded network wiring (daisy chain) Sensor Mounting Heavier than air, 6" to 12" (15 cm to 30 cm) from the floor Monitoring Area CSA: C22.2 NO.205-12 UL: UL508 (Edition 17): 2007 CE: EMC Directive 2004/108/EC, EN50270:2006, Type-1 & EN61010 FCC Listed by BTL	Indicators	LCD digital display, back lit, 128 X 64 pixel graphic
Audible Internal audible alarm (user controlled) Minimum Detection 1 ppm (with regular calibration maintenance of sensor) Repeatability < +/- 2% (with regular calibration maintenance of sensor) Accuracy	Signal	BACnet® MS/TP
Minimum Detection 1 ppm (with regular calibration maintenance of sensor)	Relay	One dry contact relay rated 2-amps @ 30v S.P.D.T.
Repeatability < +/- 2% (with regular calibration maintenance of sensor) +/- 0.3 ppm at STP at time of calibration, +/- 0.8 ppm at STP across measurement range, at time of calibration + calibration gas error Sensitivity Drift < 2% signal loss / month (with regular calibration maintenance of sensor) Response Time <60 seconds T ₅₀ Resolution Display resolution 0.1 ppm, sensor resolution 0.5 ppm Warm Up Time 5-minutes after power up (to full operation) Cross Sensitivity SO2 5 ppm = 1, H2S 5 ppm = 8, PH3 2 ppm = 2 Fusing Automatic resetting thermal overload fuse (reset capabilities to 500 times) Wiring 4-wire VAC/VDC, 16 awg, 4-conductor shielded network wiring (daisy chain) Sensor Mounting Heavier than air, 6" to 12" (15 cm to 30 cm) from the floor Monitoring Area 5000 sq. ft. CSA: C22.2 NO.205-12 UL: UL508 (Edition 17): 2007 CE: EMC Directive 2004/108/EC, EN50270:2006, Type-1 & EN61010 FCC Listed by BTL	Audible	Internal audible alarm (user controlled)
+/- 0.3 ppm at STP at time of calibration, +/- 0.8 ppm at STP across measurement range, at time of calibration + calibration gas error Sensitivity Drift	Minimum Detection	1 ppm (with regular calibration maintenance of sensor)
time of calibration + calibration gas error Sensitivity Drift	Repeatability	< +/- 2% (with regular calibration maintenance of sensor)
Response Time <60 seconds T ₉₀ Resolution Display resolution 0.1 ppm, sensor resolution 0.5 ppm Warm Up Time 5-minutes after power up (to full operation) Cross Sensitivity SO2 5 ppm = 1, H2S 5 ppm = 8, PH3 2 ppm = 2 Fusing Automatic resetting thermal overload fuse (reset capabilities to 500 times) Wiring 4-wire VAC/VDC, 16 awg, 4-conductor shielded network wiring (daisy chain) Sensor Mounting Heavier than air, 6" to 12" (15 cm to 30 cm) from the floor Monitoring Area 5000 sq. ft. CSA: C22.2 NO.205-12 UL: UL508 (Edition 17): 2007 Certifications CE: EMC Directive 2004/108/EC, EN50270:2006, Type-1 & EN61010 FCC Listed by BTL	Accuracy	+/-0.3 ppm at STP at time of calibration, $+/-0.8$ ppm at STP across measurement range, at time of calibration $+$ calibration gas error
Resolution Display resolution 0.1 ppm, sensor resolution 0.5 ppm 5-minutes after power up (to full operation) SO2 5 ppm = 1, H2S 5 ppm = 8, PH3 2 ppm = 2 Fusing Automatic resetting thermal overload fuse (reset capabilities to 500 times) Wiring 4-wire VAC/VDC, 16 awg, 4-conductor shielded network wiring (daisy chain) Sensor Mounting Heavier than air, 6" to 12" (15 cm to 30 cm) from the floor Monitoring Area 5000 sq. ft. CSA: C22.2 NO.205-12 UL: UL508 (Edition 17): 2007 CE: EMC Directive 2004/108/EC, EN50270:2006, Type-1 & EN61010 FCC Listed by BTL	Sensitivity Drift	<2% signal loss / month (with regular calibration maintenance of sensor)
Warm Up Time 5-minutes after power up (to full operation) Cross Sensitivity SO2 5 ppm = 1, H2S 5 ppm = 8, PH3 2 ppm = 2 Fusing Automatic resetting thermal overload fuse (reset capabilities to 500 times) Wiring 4-wire VAC/VDC, 16 awg, 4-conductor shielded network wiring (daisy chain) Sensor Mounting Heavier than air, 6" to 12" (15 cm to 30 cm) from the floor Monitoring Area CSA: C22.2 NO.205-12 UL: UL508 (Edition 17): 2007 CE: EMC Directive 2004/108/EC, EN50270:2006, Type-1 & EN61010 FCC Listed by BTL	Response Time	<60 seconds T_{90}
Cross Sensitivity SO2 5 ppm = 1, H2S 5 ppm = 8, PH3 2 ppm = 2 Automatic resetting thermal overload fuse (reset capabilities to 500 times) 4-wire VAC/VDC, 16 awg, 4-conductor shielded network wiring (daisy chain) Sensor Mounting Heavier than air, 6" to 12" (15 cm to 30 cm) from the floor Monitoring Area 5000 sq. ft. CSA: C22.2 NO.205-12 UL: UL508 (Edition 17): 2007 CE: EMC Directive 2004/108/EC, EN50270:2006, Type-1 & EN61010 FCC Listed by BTL	Resolution	Display resolution 0.1 ppm, sensor resolution 0.5 ppm
Fusing Automatic resetting thermal overload fuse (reset capabilities to 500 times) 4-wire VAC/VDC, 16 awg, 4-conductor shielded network wiring (daisy chain) Heavier than air, 6" to 12" (15 cm to 30 cm) from the floor Monitoring Area 5000 sq. ft. CSA: C22.2 NO.205-12 UL: UL508 (Edition 17): 2007 CE: EMC Directive 2004/108/EC, EN50270:2006, Type-1 & EN61010 FCC Listed by BTL		
Wiring 4-wire VAC/VDC, 16 awg, 4-conductor shielded network wiring (daisy chain) Heavier than air, 6" to 12" (15 cm to 30 cm) from the floor Monitoring Area 5000 sq. ft. CSA: C22.2 NO.205-12 UL: UL508 (Edition 17): 2007 CE: EMC Directive 2004/108/EC, EN50270:2006, Type-1 & EN61010 FCC Listed by BTL	Cross Sensitivity	
Sensor Mounting Heavier than air, 6" to 12" (15 cm to 30 cm) from the floor Monitoring Area 5000 sq. ft. CSA: C22.2 NO.205-12 UL: UL508 (Edition 17): 2007 Certifications CE: EMC Directive 2004/108/EC, EN50270:2006, Type-1 & EN61010 FCC Listed by BTL	Fusing	Automatic resetting thermal overload fuse (reset capabilities to 500 times)
Monitoring Area 5000 sq. ft. CSA: C22.2 NO.205-12 UL: UL508 (Edition 17): 2007 Certifications CE: EMC Directive 2004/108/EC, EN50270:2006, Type-1 & EN61010 FCC Listed by BTL	Wiring	4-wire VAC/VDC, 16 awg, 4-conductor shielded network wiring (daisy chain)
CSA: C22.2 NO.205-12 UL: UL508 (Edition 17): 2007 Certifications CE: EMC Directive 2004/108/EC, EN50270:2006, Type-1 & EN61010 FCC Listed by BTL	Sensor Mounting	Heavier than air, 6" to 12" (15 cm to 30 cm) from the floor
UL: UL508 (Edition 17): 2007 Certifications CE: EMC Directive 2004/108/EC, EN50270:2006, Type-1 & EN61010 FCC Listed by BTL	Monitoring Area	5000 sq. ft.
	Certifications	UL: UL508 (Edition 17): 2007 CE: EMC Directive 2004/108/EC, EN50270:2006, Type-1 & EN61010 FCC
	Note	