

HIGH-RELIABILITY VOLUMETRIC MICROWAVE SENSORS



Designed for use in the most security-sensitive applications, High-Reliability (Hi-Rel) Volumetric Microwave Sensors couple Southwest Microwave's field-proven microwave detection performance with comprehensive temperature testing and ruggedized componentry to maximize resistance to harsh environmental conditions and physical tampering.

Hi-Rel microwave options include a wide range of X and K-band bistatic transmitter/receiver links and monostatic transceivers. Available dual, triple and quad stack configurations make these sensors ideal for the fortification of high security installations such as nuclear power plants, government laboratories and military sites.

Hi-Rel models have an extended burn-in cycle of 5 days at 125° F (52° C) and are fully temperature tested from -40° to 150° F (-40° to 66° C), which maximizes reliability.

Heavy duty, position-locking non-corrosive mounting brackets made of anodized aluminum and stainless steel are specified with all Hi-Rel sensors. Once each unit has been mounted and aligned, four jack screws lock the unit in place and prevent it from being moved due to incidental contact.

All Hi-Rel sensors include conformal-coated circuit boards for immunity to moisture and epoxy-coated baseplates to resist corrosion. Hi-Rel microwave links are fitted with RFI/EMI shielded radomes that enclose sensor electronics and terminal strip wiring, preventing external radio frequency or electromagnetic interference from penetrating sensor electronics and affecting detection performance. Digital Hi-Rel models include additional RFI/EMI shielding on sensor circuit board.

KEY FEATURES

- RUGGED CONSTRUCTION FOR RELIABILITY AGAINST MECHANICAL ABUSE AND HARSH CLIMATIC EXTREMES
- AVAILABLE DUAL, TRIPLE AND QUAD STACK CONFIGURATIONS
- SUPERIOR RFI / EMI SHIELDING
- EXTENDED BURN-IN AND TEMPERATURE TESTING
- HEAVY-DUTY, POSITION-LOCKING MOUNTING BRACKETRY (SOLD SEPARATELY)
- FACTORY INSTALLED RADOME LATCH KITS SIMPLIFY TESTING / SERVICING



HIGH-RELIABILITY (HI-REL) MICROWAVE SENSOR MODELS

The following bi-static microwave links and mono-static microwave transceivers are available in Hi-Rel configuration. **Ranges listed are for the detection of prone crawling targets.** Contact Southwest Microwave to obtain comprehensive product and ordering information / quotations, specifications, configuration diagrams and system design assistance for all models.

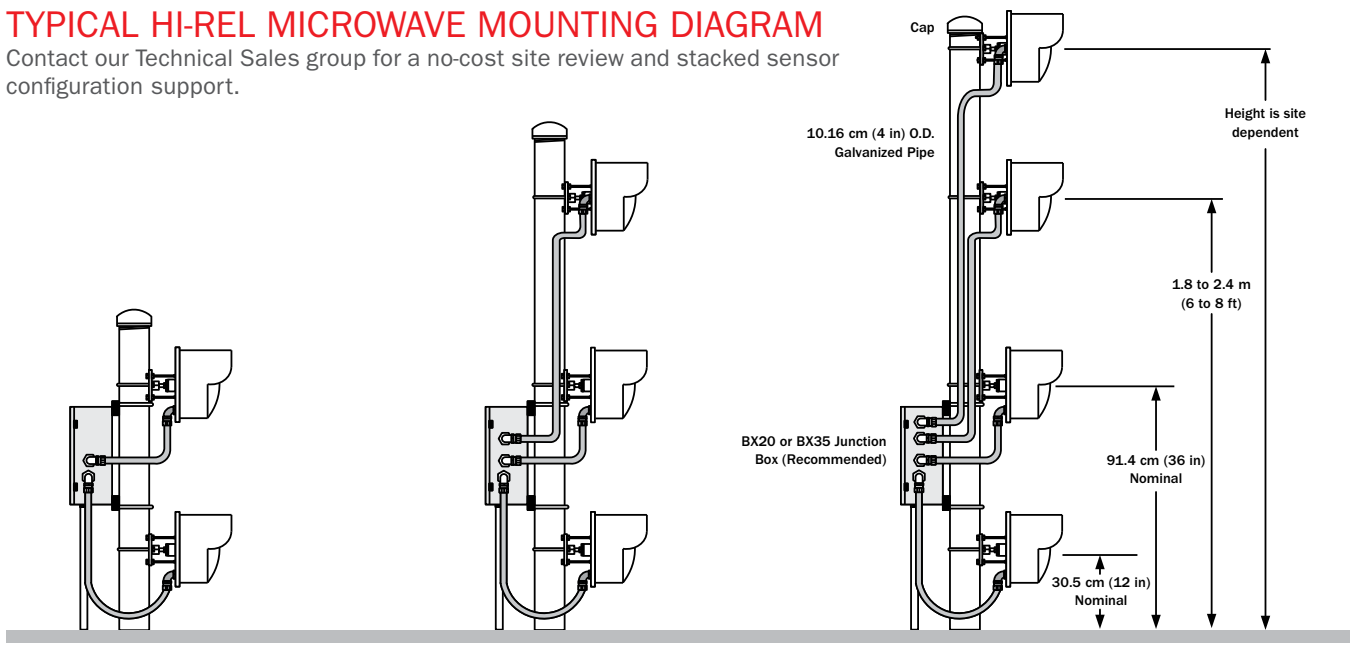
Model 300B-33257	Hi-Rel Multiple Range Microwave Link (183 M / 600 Ft Range). X-Band Frequency.
Model 310B-33259	Hi-Rel Long Range Microwave Link (183 M / 600 Ft Range). K-Band Frequency.
Model 330-33462	Hi-Rel Digital Long Range Microwave Link (183 M / 600 Ft Range). K-Band Frequency.
Model 334-33465	Hi-Rel Digital Microwave Link (183 M / 600 Ft Range). X-Band Frequency.
Model 334-33468-POE-S	Hi-Rel POE Long Range Digital Microwave Link (183 M / 600 Ft Range). X-Band Frequency.
Model 336-33464	Hi-Rel Digital Microwave Link (457 M / 1500 Ft Range). K-Band Frequency.
Model 336-33469-POE-S	Hi-Rel POE Long Range Digital Microwave Link (457 M / 1500 Ft Range). K-Band Frequency.
Model 380-33453	Hi-Rel Microwave Transceiver (15 To 49 M / 50-160 Ft Range). K-Band Frequency.
Model 385-33301	Hi-Rel Microwave Transceiver (30 To 100 M / 100-328 Ft Range). K-Band Frequency.
Model 390-33471	Hi-Rel Digital/POE Microwave Transceiver (15 To 49 M / 50-160 Ft Range). K-Band Frequency.
Model 395-33472	Hi-Rel Digital/POE Microwave Transceiver (30 To 100 M / 100-328 Ft Range). K-Band Frequency.

ACCESSORIES

MB65	Heavy-duty, position-locking mounting bracket (Required. Sold separately).
CRP	Heavy Duty Corrosion Resistant Package (MIL Spec A-8625D, P-15328)
RS13	RFI/EMI Shielded Radome with Hydrophobic Coating - Model 300B (Tx or Rx)
RS15	RFI/EMI Shielded Radome with Hydrophobic Coating - Model 310B, 330 and 336 (Tx or Rx)
RV17	RFI/EMI Shielded Radome with Hydrophobic Coating - Model 380, 385 Transceivers
RM83	Performance Monitor and Test Set
BX20 / BX35	NEMA-4X SS / NEMA 4 Weatherproof Enclosures
LF115 / LF215 / LF315	RFI/EMI Line Filters for Single, Dual, Triple Stacked Sensors

TYPICAL HI-REL MICROWAVE MOUNTING DIAGRAM

Contact our Technical Sales group for a no-cost site review and stacked sensor configuration support.



USA (CORPORATE HEADQUARTERS): Southwest Microwave, Inc., Arizona, USA | Telephone +1 (480) 783-0201

EUROPEAN OFFICES: Southwest Microwave Ltd., Worcestershire, UK | Telephone +44 1386 75 15 11