

## Technical Reference

### **LR-3000 Installation – Material List**

*The listed products are required in most installations of AWID's LR-3000 long-range reader, with vehicle tags or hand-held cards. Items 1 to 5 are AWID's standard products. Items 1 through 8 are described in AWID's technical documents. The products in items 6 through 11 are available from local distributors or online suppliers.*

Qty.	Part Number	Product	Source
1.    ___	LR-3000-B-U	Long-Range UHF Reader, 902-928 MHz band, with antenna; weather-protected.	AWID
2.    ___	LR-MB-0-0	Mounting Bracket for LR-3000 reader, 11 inches long, 2-way adjustable head.	AWID
3.    ___	(see product sheet or price list)	Tags and Cards selected for the application: WS-UHF Windshield Tags, RV-AWID Rear-View Mirror Tags, VT-UHF Sun Visor Tags, HT-UHF Hangtags, MT-UHF Metal-Mount Tags, CS-UHF Clamshell Badges, and/or GR-UHF Graphics Cards. Include in order: code format, facility or site code, and starting ID number.	AWID
4.    1	LR-KIT-0-0	Installation Kit with LR-2000 ðEVALö reader, test unit, PS-123.3A power module, 7 UHF tags and cards (listed in Item 3, above), RF signal detector, adapter cable, carrying case, instructions. ( <i>Required</i> first-time, one-time order for installing company.)	AWID
5.    ___	PS-123.3A	DC Power Supply for LR-3000 reader (1 power supply for each reader), plug-in type, 12 volts, 3.3 amperes maximum load. (Typical power specifications for LR-3000: 12-13.8 volts DC, 2 amperes rating or more, linear, regulated. See Note 1.)	AWID
6.    ___	_____	Mounting for passenger vehicles: Pole, post or pedestal to locate LR-3000 reader about 7 feet high, at side of lane (1 pole, post or pedestal for each LR-3000 if required). Mounting for other vehicle types: Call AWID's Tech Support; see LR-3000 Manual.	(Note 2)
7.    ___	_____	Cable for data: 22 gauge, 3 conductors, not twisted-pair, color-coded insulation, overall 100% shield, plastic jacket. For Wiegand or RS-232 data interface between each reader and controller panel. Each cable ___ feet long. See Note 3.	Distributor
8.    ___	_____	Cable for power: 18 gauge, 2 conductors, color-coded insulation, overall 100% shield*, plastic jacket. For DC power between each reader and the dedicated DC power supply. Each cable ___ feet long. See Note 3. ( <i>* Power cable must be shielded.</i> )	Distributor
9.    ___	_____	Vehicle sensors: safety loop (1 required for each gate); reader arming loop (1 sensor for each reader, when required to arm the reader's RF generation).	Distributor
10.   ___	_____	Gates, Gate Motors and Controllers as selected by installer.	Manufacturer
11.   1	_____	Access Control or A.V.I. System as selected by installer.	Distributor or Manufacturer

**Note 1** Each LR-3000 reader must have 1 independent, dedicated DC power supply. If the installer uses an Altronix power supply, AWID recommends Model LPS3 (linear rated) or Model SMP3 (switching type). Include required transformer. Install power supply 12 feet or *more* from the LR-3000 reader, for both power-cable length and straight-line distance.

**Note 2** Sources: See [www.Tapconet.com](http://www.Tapconet.com) or other supplier of parking or traffic control products.

**Note 3** Cables in items 7 and 8 may be combined in a single 18 gauge, 5-conductor overall-shielded cable for each LR-3000 reader.  
*\* Important: All cables, including power, must be shielded.*