



# ULTRALOOP - ULT-DIN

## VEHICLE LOOP DETECTOR

### Applications

The ULTRALOOP™ series vehicle loop detector combines small size with the full-featured functionality of the standard D-TEK product line in a DIN rail mount module.

- Sensitivity display - easy set up and installation by selecting the correct sensitivity
- Cross Talk and RFI interference display - easy identification of interference problems
- Small size - fits in to small operator housings and saving space (74 x 23 x 84mm)
- 10 sensitivity settings - gives the user the ability to select the best sensitivity level
- Low current draw - green product
- **NEW....DETECT-ON-STOP™** or (DOS®) feature will allow detection only when a vehicle has come to a complete stop on the loop. This is a worldwide unique feature to EMX detectors. Major advantage if you want to ignore cross traffic in tight spaces.

The ULT-DIN-1 provides relay contact outputs indicating vehicle presence, while the ULT-DIN provides an additional set of output contacts. This output may be used for loop fault or pulse on entry /pulse on exit, or the new EMX feature, Detect On Stop™ (DOS®). The ULT-DIN features automatic sensitivity boost (ASB), delay, fail-safe/fail-secure and infinite or normal (5 min.) presence.

The ULTRALOOP is easily installed and has user-friendly features that simplify set-up, operation and troubleshooting. Sensitivity selection is simplified by the ULTRAMETER™ display that indicates the appropriate sensitivity setting the vehicle positioned on the loop. The 10 sensitivity settings allow for finer adjustment of the detection level, while the 4 frequency selections provide greater flexibility in preventing crosstalk in multi-loop applications.

# ULT-DIN



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## Model Table

FEATURE	ULT-DIN	ULT-DIN-1
Presence output	•	•
Output B	•	
Pulse entry/exit	•	
Detect On Stop	•	
ABS	•	•
Delay	•	•
Normal/infinite presence	•	•
Loop fault output	•	

## Connections

	ULT-DIN	ULT-DIN-1
Loop	•	•
Loop	•	•
Shield	•	•
+V (12 to 24VAC/VDC)	•	•
-V (power supply common or VAC)	•	•
Presence - Relay 1 NC contact	•	•
Presence - Relay 1 common contact	•	•
Presence - Relay 1 NO contact	•	•
Relay 2 NO contact	•	
Relay 2 common contact	•	



PR-XX (light preformed loop with lightning protection)



ULT-DIN



ULT-DIN-1

## Technical Data

<b>Sensitivity</b>	10 levels, 0-9
<b>UltraMETER™ Display</b>	Indicates optimum sensitivity level, 0-9 Diagnostic aid
<b>Loop frequency</b>	4 settings (low, med-low, med-hi, high)
<b>Loop inductance</b>	20...2000μH (Q factor > 5)
<b>Grounded loop</b>	Isolation transformer allows operation with poor quality loops
<b>Automatic tuning</b>	Detector tunes to loop on power-up and following frequency count function
<b>Environmental tracking</b>	Automatic compensation
<b>Surge protection</b>	Loop circuitry protected by surge suppressors
<b>Presence relay</b>	SPDT relay contacts (form C)
<b>Output B relay</b>	SPST relay contact (form A) (available on ULT-DIN only)
<b>Contact ratings</b>	1A @ 24VDC...120VAC
<b>Power / loop fault indicator</b>	Green LED
<b>Detect / frequency count indicator</b>	Red LED
<b>Detect On Stop</b>	Requires vehicle to stop for a minimum of 1 second (1-2s typical) (available on ULT-DIN only)
<b>ASB (Automatic Sensitivity Boost)</b>	Increases sensitivity after initial detection to prevent dropout due to high-bed vehicles
<b>Power</b>	12VDC...24VDC, 24VAC
<b>Operating Current</b>	15mA standby / 45mA detect
<b>Operating temperature</b>	-40°C...82°C (-40°F...180°F) 0...95% relative humidity
<b>Dimensions (L x W x H)</b>	74mm (2.9") x 23mm (0.9") x 84mm (3.3")
<b>Weight</b>	0.25 lbs. (113 g)
<b>Mounting method</b>	DIN rail mount - 35mm width
<b>Connections</b>	ULT-DIN 10 screw terminals, ULT-DIN-1 8 screw terminals

## Ordering Information

- ULT-DIN ULTRA Vehicle loop detector, dual output, DIN rail mount
- ULT-DIN-1 ULTRA Vehicle loop detector, single output, DIN rail mount
- PR-XX EMX Lite Pre-formed Loop (XX- specify size)

WARRANTY EMX INC. the product described herein for a period of 2 years under normal use and service from the date of sale to our customer. The product will be free from defects in material and workmanship. This warranty does not cover ordinary wear and tear, abuse, misuse, overloading, altered products, or damage caused by the purchaser from incorrect connections, or lightning damage. There is no warranty of merchantability. There are no warranties expressed, implied or any affirmation of fact or representation which extend beyond the description set forth herein. EMX Inc. sole responsibility and liability, and purchaser's exclusive remedy shall be limited to the repair or replacement at EMX's option of a part or parts not so conforming to the warranty. In no event shall EMX Inc. be liable for damages of any nature, including incidental or consequential damages, including but, not limited to any damages resulting from non-conformity defect in material or workmanship. Rev 1.2 01/13/14

