

2.45 GHz**Ultra-Compact Design
Multi tag ID****HIGH SPEED****DEPENDABLE****MULTIPLE READERS****EASY AND QUICK INSTALLATION**

LPR 3035-V2

Ultra-Compact Reader - 2.45 GHz

Nominal Range* : 4m - 10m configurable

Antenna Pattern : 45°x 45°

I - INTRODUCTION

Balogh HyperX™ LPR 3035-V2 compact reader enables high speed identification of all tags in the HyperX™ product range.

The compact casing contains all the functional parts of the reading unit: antenna, RF source, demodulator, processor, and interface modules. The electronics are totally integrated into robust ABS casing and coated with a special resin.

The readers can be mounted against walls or poles, including metallic surfaces, using the optional bracket support that can be adjusted to direct the identification field towards the direction of the tags.

The LPR 3035-V2 is designed for outdoor installation.

II - OPERATING PRINCIPLE

Electromagnetic radiation characteristics in the 2.45 GHz frequency band allow high data transmission rates and directional antenna beams. Tag detection is therefore very rapid and relatively insensitive to environmental interference.

The HyperX™ tag is electro-magnetically inactive when outside of the reader's range. Its state-of-the-art feature is its capacity to reflect incident microwaves - a tag receiving a 2.45 GHz carrier will echo this signal, modulated by its individual identification code, back to the reader. The reader receives and processes this signal, sending the data to a host system via a standard interface.

III - COMMUNICATIONS

Balogh LPR 3035-V2 reader is equipped with the following interfaces :

ETHERNET
RS232, RS422, RS485,
ISO2, Wiegand (26 bits)
and USB for service

Via TTL links, this reader can substitute for most traditional contact and proximity card readers.

For computerized links, a complete dialogue can be implemented utilizing the ModBus™ protocol (by interruption from readers or by polling from the host system).

The reader disposes of optocoupled I/O enabling peripherals to be addressed.

IV - ON-BORD LOG

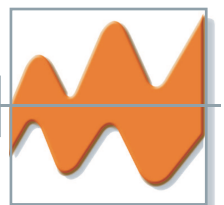
The LPR 3035-V2 reader allows logging of the last 2000 events. The messages are dated and time-stamped. The interface system can retrieve the messages via the RS link and ModBus™ protocol.

V - POWER SUPPLY

This reader has an integrated regulator that is powered from 12 to 24VDC.

A "switch-off" device puts the reader in standby mode when the voltage is insufficient.

Connection to the mains is made via an external 18W power supply (not included)

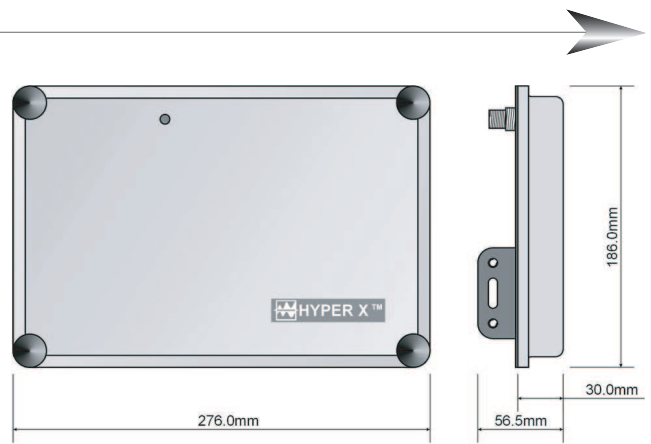


CHARACTERISTICS**

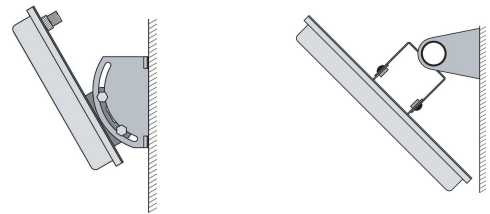
Dimensions	276 x 186 x 56.5 mm
Weight	1.3 Kg
Color	Light Grey
Operating temperatures	- 20C° to +50C°
Storage temperatures	- 40C° to +85C°
Protection level	I.P. 65
Relative humidity	90%, without condensing
Power supply	12 ~ 24 VDC - 18 W
Frequency band	2.45 GHz
Data rate (between tag&reader)	30000 kbps
Number of reading channels	31
Fault reading protocol	HDLC
Modulation type	BPSK
Rate of (Fault reading/Failure reading*)	1E-7/1E-4*
Radiated power	350mW
Nominal reading distances* configurable	4m - 10m
Speed nominal	100Km/h
Approvals	EN 60950, EN 300489-1&3, EN 50364 ETS 300440 - CE 0536

(* Normal conditions of use.

(**) Specifications do not form part of any contract and may be changed without notice.



Installation example using optional mounting bracket



APPLICATIONS



High speed identification of vehicles

- Vehicles controlled in narrow and wide lanes,
- Doppler effect filtered at high speeds,
- Well-defined reading field in the vehicle lane.

Special Vehicles access control

- Simultaneous ID of tag holders and their vehicles,
- Tag identification in almost any position,
- Robust design,

Fleet management

- Long range high speed identification of vehicles,
- Many readers can be installed in the same area,
- Reader adapted to environment.

NB

• Metal surfaces or human bodies coming between tags and the reading antennas create shadow zones in the identification area.

• The proximity of a tag and a metal or magnetic surface or a person (<5mm) may reduce the read distance.

