

TOUGH METAL CONSTRUCTION • FULLY WATERPROOF TO IPX7 • STANDARD CLOCK AND DATA OUTPUT • OTHER OUTPUTS AVAILABLE • EASY TO USE READER • SUPERB MODERN AESTHETICS



# MAGSTRIPE READER CLOCK AND DATA OUTPUT

## CONSTRUCTION - METAL

Metal readers manufactured by Paxton Access are made from tough metal. The electronics are encapsulated in a waterproof resin and the read head is constructed from stainless steel making it suitable for external use. The reader is waterproof to IPX7. A backplate is available to provide extra strong fixing. This can also be used to provide fixing onto irregular or weak substrates.

## CONSTRUCTION - PLASTIC

The housing is made from 20% glass filled Noryl. This is a very tough and inert plastic. The reader is potted, making it fully waterproof.

## SUITABILITY

The readers may be used in harsh weather conditions as it is waterproof to IPX7. The read head is durable and rated at over 1,000,000 swipes, making it suitable for all applications. The superb aesthetics of the reader make it a clear choice for sites where aesthetics are important. The reader is popular with architects and specifiers.

## FINISH

The reader comes in a satin chrome finish. This is hard wearing and suitable for the harshest conditions.

# M-EVO

Compatible with Microtrak Evolution .NET©

## SPECIFICATIONS:

**OUTPUT** - Open collector (pulled up internally to 5v with a 560 Ohm resistor)

**OUTPUT DRAIN** - Max 20mA

**WATER RESISTANCE** - High IPX7

**VANDAL RESISTANCE** - High-mazak construction

**DIMENSIONS** - 34x89x34 (WxHxD)

**WEIGHT (PACKAGED)** - 340g (400g) approx

**CABLE SUPPLIED** - 5m

**CABLE** - 9 core screened, 7x0.15mm stranded.

**OUTER DIAMETER** - 4.6mm max

**INSULATION THICKNESS** - 0.45mm

**SWIPES** - >1,000,000

**TEMPERATURE RANGE** - -20 to +70 C

**MEDIA SPEED** - 125<vcard<1250mms-1

**MEDIA ACCELERATION** - a card max=500mms-32

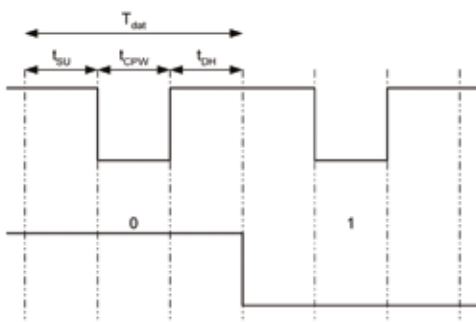
**MAGNETIC STRIPE COERCIVITY** - 50<H<6000OE

**MEDIA AMPLITUDE** - Min=20%

**TRACK READ** - 2 as standard

# MAGSTRIPE READER CLOCK AND DATA OUTPUT

## TIMING DIAGRAM



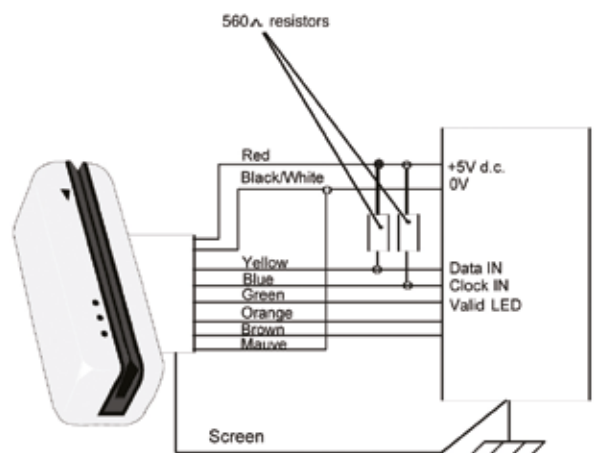
Data period	$T_{dat}$	60-3000+
Data set-up time	$t_{SU}$	1
Clock pulse width	$t_{CPW}$	25-50% $T_{dat}$
Data hold time	$t_{DH}$	$T_{dat} - t_{CPW} - 1$

## CONNECTION DETAILS

Colour	Description	Notes
Red	+5V d.c.	$4.5 < V_{IN} < 5.5$
Black	0V	Connected internally to white
White	0V	Connected internally to black
Screen	Reader case	Isolated from 0V
Yellow	Data	Open collector
Blue	Clock	Open collector
Green	Green LED	Pull low to light LED
Orange	Amber LED	Pull low to light LED
Brown	Red LED	Pull low to light LED
Mauve	Media detect/ Arrow LED	Pull low to light LED

## CABLE DISTANCES

The drivers in the electronic circuitry allow for cables to control units to achieve distances of up to 150m. This needs to be verified by each manufacturer by their own control unit equipment.



### Possible Applications for the Reader

- Access Control connected to a TouchStar Evolution Door Controller
- Access Control connected to a TouchStar TS2020 Terminal
- Secondary Clocking connected to a TouchStar TS2020 Terminal

### TouchStar Part No:

- PP1-12V-SC
- PP1-12V-SC
- PP1-12V-SC

TouchStar

Access | Time | CCTV

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