

Allflex Single Alleyway Reader Systems

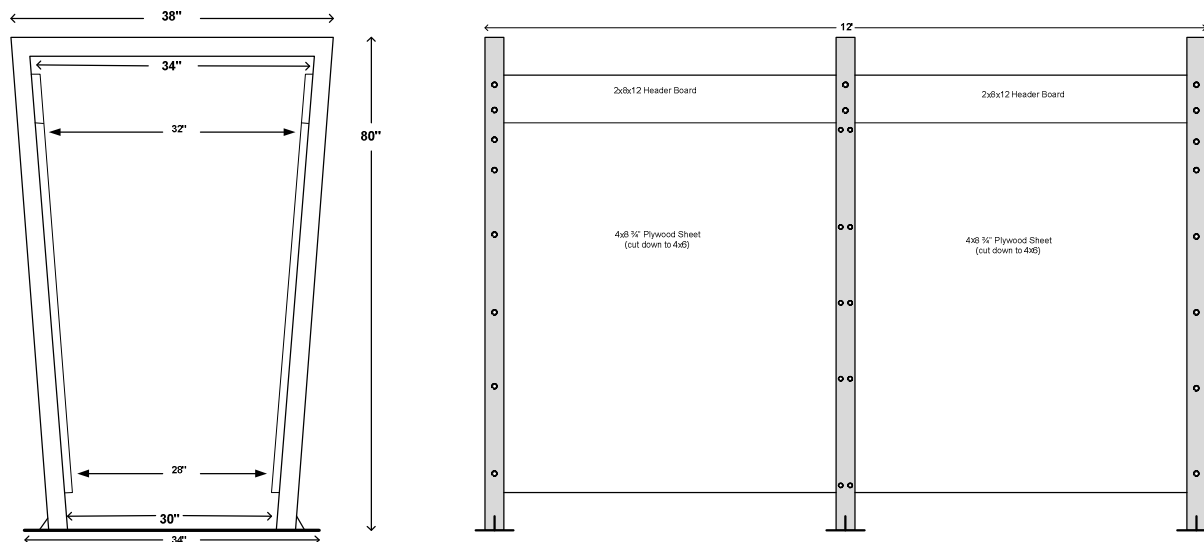


Allflex Single Alleyway System

General Description

The Allflex Single Alleyway Reader System is a fixed location, configurable EID transponder reading system that incorporates the Allflex Series Panel Readers. The Allflex Series Panel Readers are flat panel antennas and integral passive transponder reading devices that are compatible with the technical specifications of ISO Standards 11784 and 11785, including both HDX and FDX-B technologies. The Panel Readers provide the basic RFID reader functions of reading and transmitting via RS232/RS422. Serial data from the identification code contained within the passive transponder is transmitted in real time for data capture and for batch mode data logging with the Allflex Data Collector (MM410-X). The Allflex Single Alleyway Systems are intended for stationary mounting in applications where electronic, ear tagged livestock transverse past the panel system.

Allflex Framework Detail



Construction

Built around a solid steel framework and anchored to the existing foundation or concrete pad, pressure treated lumber or $\frac{3}{4}$ " plywood can be affixed to the framework to mount the Allflex Series panel readers. The Allflex Single Alleyway Reader System can be assembled in an existing alleyway. It is designed to be easily installed in a convenient location, with minimal alleyway changes. With adjustable lengths of 8, 12 and 16 feet the single alleyway can be configured to most cattle scanning applications.

Framework Specifications

Height: 80"

Width: 38"OD, 34" ID, Tapers to 34" base and 30"ID

Weight: 100lbs per frame

Frames are pre-drilled for mounting of lumber

Lengths: adjustable from 8', 12' and 16'

Base Plate: 34" plate is pre dilled with $\frac{5}{8}$ " holes for concrete anchors

Allflex Single Alleyway includes the following reader accessories

Up to (4) PNL60120-3 Allflex Series Panel Readers (depending on configuration)

(1) or (2) PW408 Panel Reader Power Supplies

(1) MM410-X Data Collector, max of (4) serial inputs (Stores up to 4000 RFID Tags)

Mounting Hardware Kit

Concrete Anchors

See attached specification sheets for more information on Allflex Panel Readers, Power Supply's and Data Collection

SPECIFICATIONS (PNL Series Panel Readers)

GENERAL

RFID Compatibility:	ISO 11784 & 11785 HDX and FDX-B
Form Factor:	Flat Laminated Plastic Enclosure
User Interface:	Red LED "Exciter Active" Visual Indicator Green LED "Good Read" Visual Indicator RS232/RS422 Serial Data Port
RS232 Serial Port:	1200 BPS to 57.6 KBPS (9600,N,8,1 default setting)
Serial Data ID Code Format	Decimal to Hexadecimal w/flexible formatting options
Memory:	Retains last ID Code read in non-volatile memory for retransmission
User Options:	Non-volatile mode control options selectable via RS232 serial port interface
Power/Data Interface:	3 meter straight cable (un-terminated) / can be extended
Antenna Tuning:	Capacitor array located inside reader compartment
Battery Power:	6 to 12 VDC (External Battery or Mains Powered Linear Regulated Supply)
Agency Certifications: (PENDING)	Electromagnetic Compatibility – FCC Part 15 Class A / CISPR 22(EN55022) * ISPRa Certification

PHYSICAL/ENVIRONMENTAL

Panel Reader Model:	PNL-2530-3	PNL-4060-3	PNL-60120-3
Dimensions:	25cm x 30cm x 30mm 9.84" x 11.81" x 1.01"	40cm x 60cm x 30mm 15.75" x 23.62" x 1.01"	60cm x 120cm x 30mm 23.62" x 47.24" x 1.01"
Weight:	~ 2kg (4.41 lbs)	~ 6 kg (13.23 lbs)	~ 18 kg (39.69 lbs)
Material:	ABS UL94 HB Plastic		
Color:	Black ABS		
Operating Temperature	-10°C to + 55°C (IEC68.2.1/.2)		
Storage Temperature	-40°C to + 85°C (IEC68.2.1/.2)		
Humidity:	0 to 100% (IEC.2.56)		
Altitude:	-100 to +3,000 meters		
Mechanical Shock:	Per IEC 68-2-27 (15g/11ms saw tooth) & 1 meter free-fall drop onto concrete)		
Vibration:	Per IEC 68-2-6 (10-55 Hz sinusoidal/0.75mm displ./1 oct./min./10 cycles)		
Hermeticity:	IP-67 (dust-tight/immersible) per IEC 529		

RELIABILITY

MTBF:	50,000 hours
MTTR:	0.5 hours (field replaceable electronics module)
Expected Life:	5 years, minimum

PERFORMANCE

Panel Reader Model:	PNL-2530-3	PNL-4060-3	PNL-60120-3
Read Distance: (@ 6 VDC battery) (add ~ 20% for 12VDC)	60cm (23.62") (HDX/HP) 45cm (17.72") (FDX-B)	80cm(31.50") (HDX/HP) 55cm (21.65") (FDX-B)	100cm (39.37") 70cm (27.56") (FDX-B)
Reading Orientation:	0° to 45° with less than 10% range decrease		
Read Zone:	80% of read distance across entire panel surface on either side		
Interrogation Rate:	~ 9 times/second		
Read Error Rate:	Less than 1 in 10 ⁶		
Exciter Signal Radiated Field Strength: @ 10 meters w/6VDC power input	94 dBuV/m	103 dBuV/m	112 dBuV/m

SPECIFICATIONS**PW407****PW408****GENERAL**

Output Rating:	6 Volts DC @ 6.0 Amps.	12 Volts DC @ 3.4 Amps.
Input Voltage:	120/240 VAC ± 10% @ 50/60 Hz	
Cable Entry:	3 PG9 Cable Clamps (IP68 Rated) compatible with cable diameter 0.1" to 0.32" (2.5mm to 8.0mm)	
AC Power Connection:	1 meter long / 3-conductor cable with IEC 320/C14 male receptacle	
Wiring Termination:	Two 2 x 6 Euro-block screw-down terminal blocks for power and data wiring	
Output Indication:	Internal green LED indicator	
Agency Certifications:	UL1950 / CSA C22.2 No.950 L3 / CE EN60950 (power supply unit) UL 50 File E27567 / NEMA Type 12 / CSA File LL42184 / IEC 60529 (IP65)	

PHYSICAL/ENVIRONMENTAL

Dimensions:	10.0"H x 8.0"W x 4.0" (25.4cm H x 20.3cm W x 10.2cm D)		
Weight:	12.0 lbs (5.5 kg)	14.5 lbs (6.6 kg)	14.5 lbs (6.6 kg)
Enclosure Material:	16 gauge steel with polyester powder coat finish		
Color:	ANSI 61 Gray		
Operating Temperature	-0°C to + 50°C		
Storage Temperature	-40°C to + 85°C		
Humidity:	0 to 95%		
Altitude:	-100 to +3,000 meters		
Mechanical Shock:	Per IEC 68-2-27		
Vibration:	Per IEC 68-2-6		
Hermeticity:	IP-65 (dust- protected / low pressure water protected) per IEC 529		

RELIABILITY

MTBF:	200,000 hours		
MTTR:	0.5 hours		
Expected Life:	5 years		

APPLICATION COMPATIBILITY

PNL2530-3 (Small):	1 to 2 Panel Readers	1 to 3 Panel Readers
PNL4060 -3 (Medium):	1 to 2 Panel Readers	1 to 2 Panel Readers
PNL60120-3 (Large):	1 to 2 Panel Readers	1 to 2 Panels Readers

SPECIFICATIONS

MM410-X

GENERAL

Input capabilities:	1 to 4 RFID reader input ports
Form Factor:	NEMA 4 Enclosure
User Interface:	Keypad Internal Modem w/standard RJ-11 connection RS232 Serial Data "Host" Port
RS232 Serial Host Port:	57.6 KBPS,N,8,1
RS232 Reader Input Ports:	4 separate inputs (9600,N,8,1)
Tag Storage Memory:	4000 tags
User Options:	Remote dial in/out access Remote pass thru ability Site identification thru unique addressing function
Power:	110 to 117 VAC grounded outlet

PHYSICAL/ENVIRONMENTAL

Model:	
Dimensions:	10.75" x 7.25"
Weight:	3.5 lbs
Material:	Powder Coated Aluminum
Color:	Tan
Operating Temperature	-10°C to + 55°C (IEC68.2.1/.2)
Storage Temperature	-15°C to + 75°C (IEC68.2.1/.2)
Humidity:	0 to 95% (IEC.2.56)
Altitude:	-100 to +3,000 meters
Mechanical Shock:	Per IEC 68-2-27 (15g/11mS saw tooth) & 1 meter free-fall drop onto concrete)
Vibration:	Per IEC 68-2-6 (10-55 Hz sinusoidal/0.75mm displ./1 oct/min./10 cycles)
Hermeticity:	NEMA 4

RELIABILITY

MTBF:	50,000 hours
MTTR:	0.5 hours (depot level service)
Expected Life:	5 years, minimum

For more information on this or other Allflex products please contact:



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