

REMOTE PAGING INDUSTRIAL CONTROL SWITCH



The MS413 is an industrial relay control system activated via radio paging messages.

For use in remote or inaccessible areas where the control of 3rd party equipment is required.

Each MS413 carries 4 independent relays which can be configured, normally open or closed.

The IP65 casing is sealed and moisture resistant and provides good protection in difficult environments.

Each MS413 contains one 12A paging receiver with dedicated firmware to control the relays.

Available with a choice of specifications.

- 1. 12 to 16Volt operation
- 2. 24 to 32Volt operation

Datanet can customise the MS413's firmware to provide additional or different functionality based on your requirements.



- Four independent power relays
- Individual relay condition LED indicators
- Relay access via clear hinged door
- Fully configurable user control card
- High performance receiver design (see specifications)
- Real time low signal indicator
- Live off air data indicator provides network activity
- Programming and diagnostic internal serial port
- Alphanumeric message available via serial port
- On-board single bleep confirmation on message receipt
- Externally accessible reset button (optional)
- Standard external 50 Ohm BNC antenna connection
- Low voltage safe supply operation
- Water and moisture resistant casing
- Security seal tie on door and cover screws
- Versatile Windows programming toolkit



Telephone: +44 (0)1296 682552 Facsimile: +44 (0)1296 682551 Web: http://www.datanet.org.uk

Email: info@datanet.org.uk

SPECIFICATIONS

Radio Specifications		
Operating frequency range	137 to 174MHz (Banded)	
Architecture	Double superhet	
Input	50 ohm (<2.0 VSWR) BNC connector	
Input configuration	Matched low noise amplifier (LNA)	
Paging sensitivity 512 bps 1200 bps 2400 bps	-125dBm -123dBm -120dBm	
Spurious rejection Image rejection	>60dB >55dB	861005 3.450 N512 CE
IMD	-20dBm	
Channel spacing	25KHz	
Selectivity	>65dB@+/-25KHz	
Frequency stability	+/-10ppm	
Operating temperature range	-10 – 50DegC	
Modulation	NRZ FSK	
Signal format	POCSAG	
Bit rate (bps) Programmable	512, 1200, 2400 bps	
	Data Specifications	
Identification codes (RIC)	20 individual receiver ID codes. Time frame independent	
Function (Sub-address)	Individually configurable (4 per ID code)	
Error detection	1 error allowed on ID codeword, 2 errors allowed on data	
Error correction	2 random bits or 4 bit burst	
Message deformatting	Alphanumeric	
Data Connector	RJ8 female programming / diagnostic port	
Serial interface speed (bps)	RS-232 (1200, 2400, 4800, 7200, 9600, 38400, 57600, 76800, 115200)	
Serial data flow control	Echo	
Standard engineering modes	Broadband (receive all data). Over air data on audio	
	Relay Specifications	
Channels	4 independently controllable single pole relays	
Relay idle condition	Normally de-energised	
Energising modes	Latching or momentary latching in programmable 5 second steps	
Relay connection	Via industry standard DIN rail terminal block	
Indicators	Relay condition indicating LED's	
Relay rating	240VAC at 10Amp per relay contact	datanet
Power Specifications		THE COMMUNICATIONS SOLUTION
Line filter	Common mode line choke	Unit 5, Glebe Close Farm, Cublington Road
Operating voltage range	12-16V or optional 24-32V	Wing, Leighton Buzzard,
Operating current (mA)	~300mA	Beatordshire. LU7 0LB. United Kingdom
Power connection	2.3mm concentric female	Tolophono: +44 (0)4206 692552

Figures above are typical and measured under normal operating conditions. As such they will not form part of any contract. Datanet policy is one of continuous improvement and we reserve the right to change specifications without notice.