

MOTTECH DECODER SYSTEM (MDS)

The MDS, a reliable, high efficiency, 2-wire decoder solution providing a substantial reduction of buried wire used for valve control and true flexibility for future expansion of existing systems

Each decoder connected to the 2-wire cable, functions as both a switching mechanism providing 24VAC to each valve and in a supervisory role monitoring critical solenoid parameters.

True two-way communications between the interface and the decoders, provide diagnostic capabilities for monitoring the general health of the 2-wire cable, decoders, and valve solenoids.



MAIN FEATURES



**ADVANCED
DIAGNOSTIC TOOLS**



**ROBUST, WATERPROOF
AND RELIABLE**



**DIGITAL AND ANALOG
SENSOR DECODER**

200
DECODERS
PER IRRI-M

200/400
DECODERS PER ACE

30
DECODERS ACTIVE
AT THE SAME TIME

4
TYPES OF OUTPUT
DECODER

The MDS is an integral part of the IRRInet system and the ICC PRO platform. The decoders can be mixed with existing and future Motorola IRRInet products, providing a highly flexible, expandable solution for any application including new installations and retrofits of existing systems.

SPECIFICATIONS

Output Decoders	1, 2, 4, 6 Solenoids
Sensor Decoders	Inputs: 1
Capacity	200 decoders p/ 2-wire interface IRRI-M: 200 decoders max. ACE: 400 decoders max.
Approvals	CE (European) marked and compliant
Output Voltage	24VAC solenoids
Input Formats	Digital: Contact or pulses Analog: 4-20mA, 0-10VDC or 0-xVDC
Surge Protection Decoders	Lightning and Surge Protection Built-in Surge Protection (in models 2,4,6 outputs)
Compatibility with the IRRI net system	ICC PRO - 5.5 and above IRRI V - 8.5 and above

2-WIRE SIZING

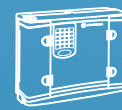
Maximum length of critical wire path

Nominal wire size - metric wire size	Maximum length of critical wire path			
	Loop		Star	
	km	miles	km	miles
1.5mm ²	8.8	5.5	2.2	1.3
2.0mm ²	11.6	7.2	2.9	1.8
2.5mm ²	14.8	9.2	3.7	2.3
3.0mm ²	17.6	10.8	4.4	2.7
3.5mm ²	20.4	12.8	5.1	3.2
4.0mm ²	23.2	14.4	5.8	3.6

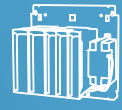
Nominal wire size - imperial wire size				
	Loop		Star	
	km	miles	km	miles
16 AWG	9.2	5.6	2.3	1.4
14 AWG	14	8.8	3.5	2.2
12 AWG	22.4	14	5.6	3.5



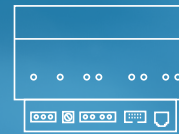
ICC PRO & Web Application



IRRI net M



IRRI net ACE



Decoder Interface



Decoder Interface



Output & Sensor Decoders



24 VAC Electric Valves



Analog & Digital Input