

# ISO 21622-1:2026-04 (E)

## Irrigation techniques - Remote monitoring and control for irrigation - Part 1: General considerations

---

<b>Contents</b>		<b>Page</b>
Foreword		v
Introduction		vi
<b>1</b>	<b>Scope</b>	<b>1</b>
<b>2</b>	<b>Normative references</b>	<b>1</b>
<b>3</b>	<b>Terms and definitions</b>	<b>1</b>
<b>4</b>	<b>Remote monitoring and control system (RMCS) type, classification and characterization</b>	<b>5</b>
4.1	General	5
4.2	Field 1: RMCS type	5
4.2.1	General	5
4.2.2	Type 0 RMCS (Type0)	5
4.2.3	Type 1 RMCS (Type1)	5
4.2.4	Type 2 RMCS (Type2)	6
4.2.5	Type 3 RMCS (Type3)	6
4.3	Field 2: RMCS classification	6
4.4	Field 3: RMCS characterization	7
<b>5</b>	<b>RMCS design parameters</b>	<b>9</b>
5.1	General	9
5.2	General criteria	9
5.3	Environmental robustness	9
5.4	Architecture	10
5.4.1	General	10
5.4.2	Data availability	11
5.4.3	Time required for discrete actuations	11
5.5	Communication technologies and protocols	11
5.6	Communication interfaces	12
5.7	Signal connections	12
5.8	Data transmission modes	12
5.8.1	General	12
5.8.2	Devices unable to initiate data transmission	12
5.8.3	Devices able to initiate data transmission	12
5.9	Power supply	13
5.10	Runtime	13
5.11	Supported sensors and actuators	13
5.12	Wiring specifications	14
5.12.1	General requirements	14
5.12.2	Wire sizing	14
5.12.3	For analog inputs and outputs	14
5.12.4	For field buses	14
5.13	Safety	14
5.14	Electromagnetic compatibility (EMC) requirements	14
<b>6</b>	<b>RMCS specifications</b>	<b>15</b>
6.1	System specifications	15
6.1.1	General	15
6.1.2	Requirements	15
6.1.3	Recommendations	15
6.2	Hardware specifications for controllers developed for irrigation	15
6.2.1	Requirements	15

6.2.2	Recommendations.....	16
6.3	Supervisory and control software specifications.....	16
6.3.1	General.....	16
6.3.2	Requirements.....	16
6.3.3	Recommendations.....	16
<b>7</b>	<b>Documentation.....</b>	<b>17</b>
	<b>Bibliography.....</b>	<b>18</b>