

# 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>