# **REQUERIMIENTOS FUNCIONALES Y NO FUNCIONALES**

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**1. REQUERIMIENTOS FUNCIONALES**

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| Historic review | | | |
| Rev. | Change description | Author | Date |
| 001 | Document construction |  | 02 septiembre 2024 |
| 002 | Structural Change |  |  |
| 003 | Simple Correction |  |  |
| 004 | Structural Change |  |  |
| 005 | Structural Change |  |  |
| 006 |  |  |  |
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| Ref # | Functions | Category |
| 1. | Comunicación |  |
| 1.1 | Permitir la comunicación del Arduino nano - Can – Rasberry pi 4 |  |
| 1.2 | Permitir la comunicación por SSH para teleoperación |  |
| 2.1 | Permitir la locomoción para HOME |  |
| 2.2 | Permitir la locomoción para levantarse |  |
| 2.3 | Permitir marcha estática |  |
| 2.4 | Permitir la locomoción para moverse |  |
| 3.1 | Permitir interacción entre la visualización y simulación |  |
| 3.2 | Permitir interacción entre la visualización y robot físico |  |

**2. REQUERIMIENTOS NO FUNCIONALES**

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| 005 | Structural Change |  |  |
| 006 |  |  |  |

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| Ref # | Description | Category |
| 1. | Software |  |
| 1.1 | Arduino IDE 2.2.1 |  |
| 1.3 | Ros2 Humble |  |
| 1.4 | Python 3.10 |  |
| 1.5 | Ubuntu 22.04 |  |
| 1.6 | Docker 24.0.5 |  |
| 2. | Hardware |  |
| 2.1 | Dynamixel AX-12+ |  |
| 2.2 | Arduino nano |  |
| 2.3 | Modulo CAN msp 2515 |  |
| 2.4 | 74LS241 |  |
| 2.5 | Sensor mpu 9250 |  |
| 2.7 | Módulo de potencia 5v 10a |  |
| 2.8 | Módulo de potencia 12v 10a |  |
| 2.9 | Batería LiPO 6 Celdas 22.4 v 30c 5000mAH |  |
| 2.10 | Pantalla 3.5 in RPI Display |  |