
 <b>RAND WATER</b>		<b>RAND WATER AUTOMATION ASSET MANAGEMENT</b>	
<b>TITLE HMI TOUCH PANEL SPECIFICATION</b>		<b>DOC. NO: RW AAM 06004</b>	
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## Document Control Sheet

### Record of Revisions

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## 1. INTRODUCTION

- 1.1.1. This document details the technical specification required for the Human Machine Interface (HMI) intended for use in industrial environments at Rand Water. This document must be read in conjunction with the technical specification documents on PLC and SCADA.

## 2. SCOPE OF THE DOCUMENT

- 2.1.1. The scope of this specification is limited to touch panels that use **non**-Microsoft Windows Operating systems. The preferred operating systems currently are the Magelis (embedded) operating system.

### 2.2. UNIT REQUIREMENTS

- 2.2.1. The default unit shall:

- 2.2.1.1. Be the Schneider Electric Magelis HMIG3U Premium Box with the HMIDT642 Multi Touch Smart Display Unit. If a different display unit size is needed it will be specified in the contract document.

- 2.2.1.2. 1GB SD memory card.

## 3. COMPUTER DATA REQUIREMENTS

- 3.1.1. The panel shall handle vibrations caused by the equipment installed in the same location as the panel.
- 3.1.2. The panel shall have an IP65 protection.
- 3.1.3. The encasing shall either be steel or aluminium.

## 4. INTERFACES

- 4.1. The panel shall have the following external interfaces:

- 4.1.1. Communication shall be Ethernet (10/100 Base-T) and Serial (Modbus).

## **5. INSTALLATION**

- 5.1.1. The Contractor shall supply and ensure that the panel has a strong and rugged housing to prevent or minimise electromagnetic interference.
- 5.1.2. The Contractor shall provide a separate circuit breaker/fuse for a voltage supply to the HMI. The circuit protection shall be supplied and installed by the Contractor.
- 5.1.3. The Contractor shall supply the Engineer with drawings for both the dimensions of the HMI as well as the cut-out hole on the control panel.
- 5.1.4. The HMI shall be fitted onto the main control panel using screws of appropriate size.
- 5.1.5. The panel shall be earthed on the chassis of the control panel using wire with appropriate dimensions.
- 5.1.6. Towards the completion of installation, the Contractor shall supply the Engineer with the following:
  - 5.1.6.1. The serial number of the HMI
  - 5.1.6.2. The TCP/IP address of the HMI
  - 5.1.6.3. Where applicable, the configuration required for the application to function properly.
- 5.1.7. The Contractor shall purchase and install all the required software for the HMI.
- 5.1.8. The Contractor shall configure or develop a page within the HMI application to look specifically at the memory resources.
- 5.1.9. The HMI shall be configured to automatically login during start up and all the required software must start automatically.
- 5.1.10. The Contractor shall hand-over all software applications to Rand Water after the completion of the contract.

## **6. OTHER**

The Contractor shall comply with the Manufacturer's installation and other guidelines.