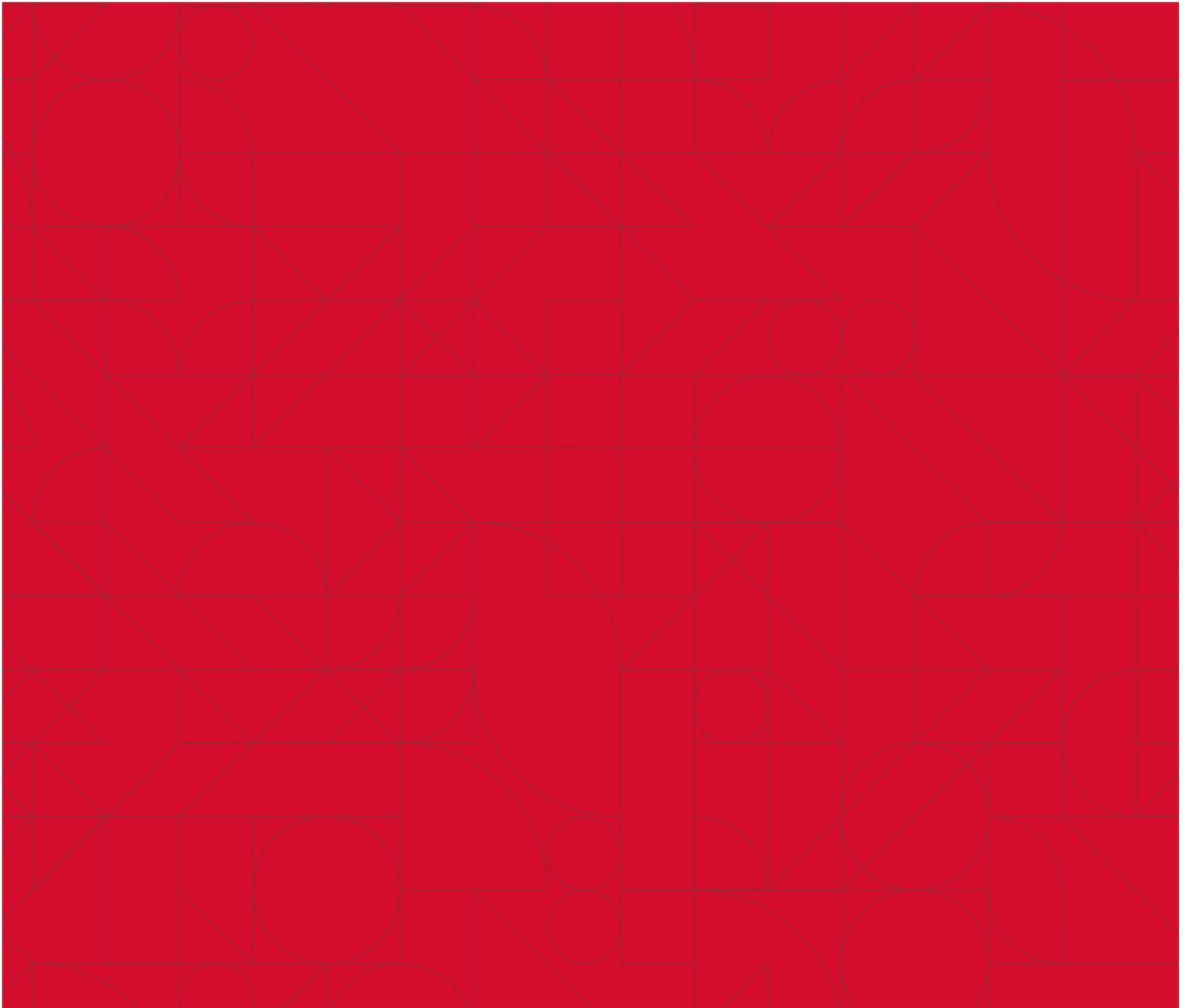


workware™

Tech Fact Sheet

July 22, 2015

HAWORTH®



Thank you for your interest in Workware® by Haworth. Haworth is a leader in collaborative technologies in the workplace. As the newest product in our Workware technology portfolio, we are pleased to offer the next generation of Workware Wireless.

Workware Wireless Pro is a software experience that supports unlimited simultaneous sharing and communication for multiple users in real time. Wireless and secure at an enterprise level, content sharing is simple and intuitive regardless of participant's physical location or device used.

- All at once - Every Workware Wireless Pro session allows an unlimited number of users, on-or-off-site to share unlimited content in real time.
- Innovative - Workware Wireless Pro enables all involved to actively participate and contribute. Participants can add, combine, or shuffle the order of thoughts presented in real time. Ideas come together for a new level of sharing. Whether you are across the table, across town or across the pond - Workware Wireless Pro inspires the progress of a team - well beyond the four walls of a conference room.
- Flexibility built in - Offers support for sharing from Android, iOS, Windows and Mac, to be as mobile as your device. Workware Wireless Pro eliminates the hassles of connecting with cables and reduces workspace clutter. Wireless connectivity enables ultimate freedom in designing your space.
- Functional & Secure - Users can control the screen layout, allowing them to view multiple pieces of content, stack content or focus on one piece at a time. Workware Wireless Pro also offers moderated session controls and the ability to set secure screen keys for added privacy and control.

- Focused & Highly Defined - View the details of your meetings content in sharp, visually stunning 1080p image quality. Share your entire screen, a specific piece of content or a single app window. The variety of new sharing tools can keep the group focused on the meeting topic, not distracting desktop wallpapers or pop-up notifications.

- Attention to Detail - Workware Wireless Pro offers a simple and intuitive user interface, with an ease of connection, speed of sharing, and configuration of content. Graphic elements are subtle and unobtrusive and with standard controls it offers predictable behavior across devices and screens.

Also available is the Workware Wireless Base package. Workware Wireless Base provides the modern experience of Workware Wireless Pro, with support for all devices, two way viewing, content control and 1080p for up to 10 simultaneous users, and 4 shared screens.

FEATURE COMPARISON

The Workware Wireless solution consists of both a Base and a Pro version with corresponding feature sets for each.

	Base	Pro
Simultaneous Users	10	Unlimited
Simultaneous Content	4	Unlimited
1080p Display Resolution	✓	✓
Displays Around You & Recently Used	✓	✓
Windows & Mac Compatibility	✓	✓
-Screen Sharing	✓	✓
-App Window Sharing		✓
-Media Files		✓
iOS & Android Compatibility	✓	✓
-Screen Sharing (Android 5.0+ Only)	✓	✓
-Media File Sharing	✓	✓
-Camera Sharing	✓	✓
-Web View Sharing (Android 4.4 and lower)	✓	✓
Content Arrangement Control	✓	✓
Remote Control & Viewing	✓	✓
Upgrades Over Network	✓	✓
Security Key Control Access	✓	✓
Enterprise Level Security	✓	✓
Dedicated Setup Support	✓	✓
Optional Software Maintenance Extension Agreement	✓	✓
High Definition Remote Viewing		✓
Moderator Control		✓

TECHNICAL DETAILS

Wireless Antenna

The wireless antenna is programmed to turn on and broadcast a standard 802.11-N in the event that there is no detection of a connected network cable. If a network cable is connected to the unit, the Wi-Fi antenna will deactivate and the unit will pull a DHCP address from the network.

Security Protocols

64/128 bit WEP/WPA/WPA2-PSK
Standards and Frequency Channels
IEEE 802.11b/g/n 2.4GHz, IEEE 802.3 (10BASE-T)
IEEE 802.3u (100BASE-TX)
Channels: 11 (U.S., Canada), 13 (Europe), 14 (Japan)

TCP/IP Port Traffic

Traffic is sent to and from the client to the Workware Wireless Module on the TCP ports indicated here:

Control port - 53100

Stream port -53101

Notification port – 53102

These ports are customizable to match the needs of your network.

Bandwidth Utilization

Bandwidth utilization varies depending on the client's screen resolution and the type of content being shared. Higher resolution displays and content that frequently refreshes the screen will require more bandwidth.

A 1024x768 display running a presentation with a high refresh rate will transfer data at approximately 2Mbps. Increasing the resolution to 1920x1080 raises the bandwidth consumption to approximately 3.5Mbps.

While streaming video content, bandwidth utilization varies based on the bitrate of the source video file. For example, a 1080p MOV file with a bitrate of 6674kbps will consume approximately 6.5Mbps (6674kbps/1024 = 6.517Mbps).

Workware Wireless Module 2.0 Hardware Configuration

Dimensions

Size : 135mm x 100mm x 21mm or
5.3" x 3.9" x 0.8"

System Specifications

CPU: Freescale i MX6 quad-core Cortex-A9 @ 1.2GHz

Memory: 2GB DDR3-1066 (soldered on-board)

Storage: SATA SSD 32GB
Micro-SD socket

GPU: Graphics Processing Unit supporting OpenGL ES 1.1 and 2.0, Open VG 1.1 and Open CL EP
Video Processing Unit supporting multi-stream 1080p, H.264, VC1, RV10, DivX HW decoding

Primary Display: HDMI 1 max resolution 1920x1200

Secondary Display: DVI-D Max resolution 1920x1200

LAN: Two 1000 BaseT Ethernet Ports

WiFi: 802.11 b/g/n Wi-Fi, Single Antenna

Bluetooth: Bluetooth 3.0 (Future Development)

Audio: S/PDIF 5.1 (electrical through 3.5mm jack)
Stereo line-out, Stereo line-in

USB: Four USB 2.0 standard A type connector - max current 1A per port
USB OTG micro-USB connector

Serial: Two RS232 serial ports, ultra mini serial connector

Operating Temperature:

Commercial: 32F - 118F

Extended: -4F - 140F

Operating System: Android 4.4.2

Power

Power Supply: Unregulated 10 to 16 volt input

Power: 4W - 8W (depending on system load)

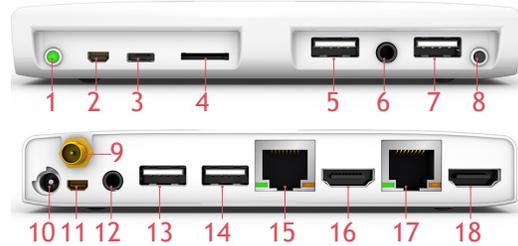
Network Operations Modes

Wireless Access Point: Deployed as a standalone WAP to support wireless peer-to-peer traffic. Configurable SSID and security settings. WAP mode disables Ethernet adaptor to disallow bridging.

Ethernet Client: Connected to existing network via ethernet connection. Supports either DHCP or static IP configurations. Ethernet mode disables wireless antenna to disallow bridging to wireless.

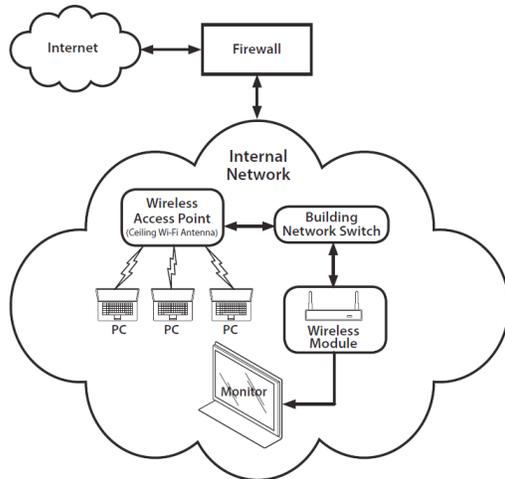
Wireless Clients: Connected to existing network via wireless antenna. Supports either DHCP or static IP address configurations. Wireless mode disables Ethernet to disallow bridging.

Workware Wireless Module 2.0 Hardware Ports



1. Power Indicator - An indication of power on or off
2. RS-232 - This is not used
3. Mini USB - This is not used
4. Micro SD Card - This is not used
5. USB 2.0 - This is not used
6. Audio Input - This is not used
7. USB 2.0 - This is not used
8. Power Button - Push and hold to turn the module off
9. Wireless Antenna - For use with access point or for connecting to existing wireless network
10. Power - Connect to 12V , 1.5A Power Supply
11. RS-232 - This is not used
12. Audio Output - This is not used
13. USB 2.0 - This is not used
14. USB 2.0 - This is not used
15. Network Port 1 - Connect to LAN
16. DVI Output - This is not used & is plugged
17. Network Port 2 - This is not used & is plugged
18. HDMI Output - Used to connect with an HDMI cable to Display

Workware Wireless Module 2.0 Topology



NOTES

- * Required for license activation and software updates.
- **Default values which can be changed from the configure panel.