# Section XXXXX SECURITY ACCESS AND SURVEILLANCE

# HONEYWELL VIDEO SYSTEMS HREP2 H.264 PERFORMANCE SERIES ENTRY-LEVEL EMBEDDED DIGITAL RECORDER

# PART 1 – GENERAL

A. The intent of this document is to specify the minimum criteria for the design, supply, installation, and commissioning of The Embedded Digital Recorder.

### 1.01 SUMMARY

A. The Embedded Digital Recorder shall offer the latest in digital technology, providing unparalleled stability, security, and ease of use, with advanced algorithms, fast capture rates, and a unique Graphical User Interface (GUI).

### 1.02 REFERENCES

- A. Conformity for Europe (CE)
- B. RoHS Compliant (RoHS)

## 1.03 DEFINITIONS

- A. No Substitutes: The exact make and model number identified in this specification shall be provided without exception.
- B. Or Equal: Any item may be substituted for the specified item provided that in every technical sense, the substituted item provides the same or better capability and functionality.
- C. Or Approved Equal: A substitute for the specified item may be offered for approval by the Owner. The proposed substitution must, in every technical sense, provide the same or better capability and functionality as the specified item. Such requests for approval shall be submitted in accordance with the provisions of PART 1.05 SUBMITTALS, and must be obtained within the time frames outlined.

### 1.04 SYSTEM DESCRIPTION

A. The Embedded Digital Recorder shall offer the latest in digital technology, providing unparalleled stability, security, and ease of use, with advanced algorithms, fast capture rates, and a unique Graphical User Interface (GUI). Available in 4, 8 and 16 channel configurations with recording capability up to 400/480 IPS (PAL/NTSC) at D1/960H resolution. The system is a complete analog digital video recording solution. The combination of motion detection, audio, image rates, mapping capabilities, and remote notification technologies shall provide an extremely flexible and reliable system.

### 1.05 SUBMITTALS

- A. General: Submittals shall be made in accordance with the Conditions of the Contract and Submittal Procedures Section.
- B. Shop Drawings and Schematics: Shall depict The Embedded Digital Recorder in final proposed "as built" configuration. The following must be provided:
  - 1. Connection diagrams for interfacing equipment.
  - 2. List of connected equipment.
  - 3. Locations for all major equipment components to be installed under this specification.
- C. Product Data: The following shall be provided:
  - 1. Technical data sheets.
  - 2. A complete set of instruction manuals.
- D. Quality Assurance Submittals: The following shall be submitted:
  - 1. Checkout Report: The Contractor shall provide the Owner with a checkout report for each Embedded Digital Recorder. The report shall include:
    - a. A complete list of every device.
    - b. The date it was tested, and by whom.
    - c. If retested, the date it was retested, and by whom.
    - d. The final test report shall indicate that every device was tested successfully.
  - 2. Manufacturer's Instructions: The Contractor shall deliver **TBD** sets of System Operation and Maintenance Manuals (if available) to the Owner.

3. Notice of Completion: When the final acceptance has been satisfactorily completed, the Owner shall issue a notice of completion to the Contractor.

# 1.06 QUALITY ASSURANCE

A. Manufacturer's Qualifications: The Embedded Digital Recorder manufacturer shall provide 24/7 technical assistance and support via a toll-free telephone number.

# 1.07 DELIVERY, STORAGE, AND HANDLING

- A. General: Delivery, storage, and handling of The Embedded Digital Recorder shall be in accordance with the manufacturer's recommendations.
- B. Ordering: The manufacturer's ordering instructions and lead-time requirements must be followed in order to avoid installation delays.
- C. Delivery: The Embedded Digital Recorder shall be delivered in the manufacturer's original, unopened, undamaged container with identification labels intact.
- D. Storage and Protection: The Embedded Digital Recorder shall be stored and protected from exposure to harmful weather conditions and at the environmental conditions recommended by the manufacturer.

#### 1.08 PROJECT CONDITIONS

- 1.09 SEQUENCING
- 1.10 SCHEDULING
- 1.11 WARRANTY
  - A. General: The warranty period shall be a minimum of twenty-four (24) months from the manufacture date code under normal use and service. Hard Drives are included in this warranty.

## 1.12 MAINTENANCE

- A. Preventative Maintenance Agreement During Warranty: As a separate price item, the Contractor shall provide preventative maintenance during the warranty period. Maintenance shall include, but not be limited to:
  - 1. Labor and materials, at no additional cost, to repair the Embedded Digital Recorder Digital Recorder.
  - 2. Labor and materials, at no additional cost, to provide test and adjustments to The Embedded Digital Recorder Digital Recorder.
  - 3. Regular inspections.
- B. Preventative Maintenance Agreement: As a separate price item, the Contractor shall provide a complete Maintenance Agreement for a period of **TBD** months after the conclusion of the warranty period. The Maintenance Agreement shall include, but not be limited to:
  - 1. Labor and materials, at no additional cost, to repair Embedded Digital Recorder Digital Recorder.
  - 2. Labor and materials, at no additional cost, to provide test and adjustments to the Embedded Digital Recorder Digital Recorders.
  - 3. Regular inspections.

## 1.13 TRAINING

- A. Operator training shall be conducted for a minimum of 2 sessions, with a session length of 6 hours at the customer's site.
- B. Training shall include, but not be limited to Embedded Digital Recorder operation and diagnostics.

# **PART 2 – PRODUCTS**

### 2.01 MANUFACTURED UNITS

#### A. Model Number/Descriptions Table

Part Number	Description
HREP24D500X	DVR H.264, 4CH, 100IPS@D1/960H, 500GB, USB, DVD, PAL
HREP24D1TX	DVR H.264, 4CH, 100IPS@D1/960H, 1TB, USB, DVD, PAL
HREP28D1TX	DVR H.264, 8CH, 200IPS@D1/960H, 1TB, USB, DVD, PAL
HREP28D2TX	DVR H.264, 8CH, 200IPS@D1/960H 2TB, USB, DVD, PAL
HREP216D1TX	DVR H.264, 16CH, 400IPS@D1/960H, 1TB, USB, DVD, PAL
HREP216D2TX	DVR H.264, 16CH, 400IPS@D1/960H, 2TB, USB, DVD, PAL
HREP216D4TX	DVR H.264, 16CH, 400IPS@D1/960H, 4TB, USB, DVD, PAL

## **Potential HREP2 DVR Accessories**

Model Number	Description
HREP2RC	IR remote controller for HREP2
HREP2RMKT	19-inch rack mount kit, brackets & mounting hardware
HREP2PS	Spare external adapter power supply

### 2.02 SYSTEM PERFORMANCE

- A. The Embedded Digital Recorder shall include, as a minimum, the following features/functions/specifications:
  - The Embedded Digital Recorder must be protected by the most extensive support services in the industry, including Customer Service, Pre-Sales Applications Assistance, After-Sales Technical Assistance, access to Technical Online Support, and Online Training using web conferencing. The manufacturer shall provide 24/7 technical assistance and support via a toll-free telephone number at no extra charge.
  - 2. The Embedded Digital Recorder and its components shall be thoroughly tested before shipping from the manufacturer's facility.
  - 3. The Embedded Digital Recorder shall consist of three (3) major components:
    - a. Digital Recorder
    - b. Mobile Apps for iOS and Android devices
    - c. HJC4000 remote keyboard control via IP
    - d. Multi-site Remote Video Software single license

- A. The Digital Recorder shall include, as a minimum, the following features/functions/specifications:
  - 1. The Digital Recorder shall be optimized and designed for Linux Embedded, offering stability, security, and ease of use, and shall allow the user to edit network settings.
  - 2. The Digital Recorder shall come preconfigured with a DHCP enabled IP address and subnet mask to allow for installation in many IP settings without the need to reconfigure TCP/IP settings.
  - 3. The Digital Recorder shall be available with four (4), eight (8), or sixteen (16) BNC composite video inputs. All models must include corresponding BNC looping video outputs.
  - 4. The four (4) input Digital Recorder shall record at a rate of 100/120 images per second (ips) at D1/960H resolution, with real-time viewing of 25/30 ips per camera for live video.
  - 5. The eight (8) input Digital Recorder shall record at a rate of 200/480 images per second (ips) at D1/960H resolution, with real-time viewing of 25/30 ips per camera for live video.
  - 6. The sixteen (16) input Digital Recorder shall record at a rate of 400/480 images per second (ips) at D1/960H resolution, with real-time viewing of 25/30 ips per camera for live video.
  - 7. The Digital Recorder shall utilize H.264 image compression, and offer the following resolutions (depending on model) available on a per camera basis:
    - a. 352x240 (NTSC)
    - b. 352x288 (PAL)
    - c. 704x240 (NTSC)
    - d. 704x288 (PAL)
    - e. 704x480 (NTSC)
    - f. 704x576 (PAL)
    - g. 960x480 (NTSC)
    - h. 960x576 (PAL)
  - 8. The Digital Recorder shall allow the user to adjust the resolution, quality, motion sensitivity, and number of images per second each camera will record. These adjustments shall be configurable per video input.
  - 9. The Digital Recorder, depending on number of inputs, shall offer the following on board storage hard drive capacity options:

4 Channel:	500 Gigabytes 1.0 Terabyte
8 Channel:	1.0 Terabyte 2.0 Terabytes
16 Channel:	<ol> <li>1.0 Terabyte</li> <li>2.0 Terabytes</li> <li>4.0 Terabytes</li> </ol>

- 10. The Digital Recorder must be housed in a metal case. The case shall be no higher than two (2) rack units (2U), and be designed to fit into a 19" EIA rack.
- 11. The Digital Recorder shall have the ability to easily backup important video to an external media location, CD or DVD disk (8 & 16ch DVR), USB Drive (4, 8, 16ch DVR). The unit must not stop recording during the backup process. To ensure the integrity of data, the digital recorder shall use a proprietary compression format that can only be read by the digital recorder's backup program; no other viewer can read the video.
- 12. The Digital Recorder shall include backup viewer software, allowing the user to playback the exported video in its proprietary format on a PC
- 13. The 4, 8 & 16ch Digital Recorder must include a DVD-RW recorder allowing for up to 4+ Gigabytes of video data to be stored on each DVD and two (2) USB inputs as standard.
- 14. The Digital Recorder shall include a minimum of the following front panel controls, devices, and LED's:
  - a. Hard Drive Activity LED
  - b. Power LED
  - c. DVD-RW Drive (8 & 16ch DVR)
  - d. DVD-RW Open Tray Button
  - e. One USB input
  - f. Jog-shuttle for playback control (TBC)
  - g. Operational, PTZ, and programming control
- 15. The Digital Recorder shall include a minimum of the following rear-panel connectors:
  - a. BNC Connectors for Camera Inputs
  - b. Sensor/Alarm Inputs

- c. Control Output
- d. Low voltage power-supply input
- e. RCA Audio Line In x 4
- f. RCA Audio Line Out
- g. HDMI Monitor Output
- h. VGA Monitor Output
- i. RS-485 Interface
- j. RS-232 Interface
- k. RJ-45 Network port WAN (UPLINK)
- 1. RJ-45 Network port LAN (DOWNLINK)
- m. e-SATA connector
- 16. All Digital Recorders shall include the following components from the manufacturer:
  - a. Software CD (includes manual and remote software)
  - b. Power Adapter and 120/240 VAC power cord
  - c. IR Remote Controller
  - d. User Manual
  - e. Quick Installation Guide printed copy in EN, SP, FR, IT GE, NL languages
- 17. The Digital Recorder shall come pre-configured for fast and seamless integration within existing IT infrastructures. The unit must offer the following network setup options:
  - a. The ability to throttle the bandwidth of the digital recorder to ensure that images and system messages are delivered as quickly as possible within the capabilities of the network's available bandwidth.
  - b. The ability to view the IP configuration of the digital recorder.
- 18. The Digital Recorder must include a System Log to record and display information pertaining to alarm events, digital recorder reboots, and other related information, record/display hardware information pertaining to system recording successes and failures, and other related information. The user shall have the ability to export the log information.
- 19. The Digital Recorder shall include a User Management Console, which allows the user to create, edit, and delete user accounts. Each account can be assigned different privileges that limit the usage of the system. Privileges shall include, but not be limited to, the following functions:
  - a. Live view
  - b. Search & Playback with Thumbnails method
  - c. Setup
  - d. PTZ

- e. Archive
- f. Remote Access
- 20. The Digital Recorder shall allow the user to view the software version of the digital recorder.
- 21. The 4, 8, and 16 input digital recorder shall include four (4) sensor inputs, for use with devices such as motion detectors, glass breakage alarms, door and window sensors, etc., and the inputs must be configurable via software for Normally Open (NO), or Normally Closed (NC).
- 22. The digital recorder shall include the capability of recording four (4) channels of audio on the 4, 8, and sixteen 16 ch DVR. "Line-In" RCA audio input shall be provided.
- 23. During power-up, the digital recorder shall run a series of self-tests, and display messages as the various hardware and software sub-systems are activated. After power-up, the digital recorder's software must load automatically and display the main screen.
- 24. The camera status for each camera shall be displayed next to the camera number (or name) in the video display area. The information must include:
  - a. Camera number or custom name.
  - b. Recording status, which must show whether a camera is currently being recorded continuously, whether a camera is recording based on motion.
  - c. Special recording status, which must indicate whether a camera's associated sensor has been activated, and/or when the user activates the instant recording option for the selected camera.
- 25. The following screen division sets shall be available to the operator of the digital recorder (depending on model):
  - a. Display the first four videos (1-4) in the video display area.
  - b. Display the next four videos (5-8) in the video display area.
  - c. Display the next four videos (9-12) in the video display area.
  - d. Display the next four videos (13-16) in the video display area.
  - e. Display videos one through nine (1-9) in the video display area.
  - f. Display videos one through nine (1 main + 5) in the video display area.
  - g. Display videos one through nine (1 main + 7) in the video display area.
  - h. Display all sixteen (16) videos in the video display area.
- 26. The digital recorder shall allow for user definable, descriptive camera names of up to seven (8) alpha-numeric characters.

- 27. To optimize the clarity and detail of recorded video, the digital recorder shall have the ability to adjust each video input's brightness, contrast, tint, and color.
- 28. The digital recorder shall incorporate motion detection, including the ability to create multiple detection regions for each video input.
- 29. The digital recorder shall include the option of displaying the associated video full screen upon a motion or sensor event.
- 30. The digital recorder shall include the ability for post-alarm recording, which must record video for a specified time before and/or after a motion or sensor alarm has occurred. The time period must be selectable from 5 to 180 seconds.
- 31. The digital recorder must include a video loss alarm function to allow an alarm event to occur when a camera loses signal for any reason (e.g. power failure, cable being cut, camera damage, etc.).
- 32. Panic recording must be available to manually start a camera recording, superseding the current schedule. This recording shall be started by pressing the Panic Recording button on the front control panel or the remote control.
- 33. Through the remote access via web browser, the user shall have the ability to export single images in the JPG file format and save video clips in the AVI format.
- 34. A watermark process must be in place to verify integrity of AVI video clip files burned to CD, DVD, or USB at the front panel of the DVR.
- 35. The digital recorder shall incorporate an internal RS-485 connector, with the ability to control multiple pan/tilt/zoom (PTZ) cameras. Depending on the model, control must include multiple pan, tilt, & zoom speed, iris control, focus control, programming presets, and viewing presets.
- 36. The digital recorder shall support the Honeywell VCL and Honeywell MAXPRO protocols.
- 37. The digital recorder shall include play controls to playback the recorded video either forward or reverse, at multiple speeds.
- 38. The digital recorder shall allow the operator to perform an index search based upon motion detection, sensor activation and video loss events, greatly reducing the amount of time required to search through saved video.
- 39. The digital recorder shall adjust for Daylight Savings Time changes.

- 40. The digital recorder shall incorporate hardware watchdog to restart the system in the event of a system lock-up.
- A. The DVR remote access shall include, as a minimum, the following features/functions/specifications:
  - 1. The remote viewing software shall allow a user to operate and maintain the Digital Recorder remotely, and must connect using standard TCP/IP protocol through connection types such as LAN.
  - 2. The remote software shall provide the user with most of the features and functions available at the local Digital Recorder. The remote features and functions must include viewing live video, searching through archived video, exporting images and video clips, and most setup functions.
  - 3. The remote video software shall allow up to ten (10) users to simultaneously connect to a single Digital Recorder. Each user can perform functions on the unit and not effect the other users. The unit shall only allow one user to access the setup.
  - 4. To ensure that only authorized personnel are allowed to log in to the Digital Recorder, the remote video software shall utilize user accounts with assigned privileges, allowing or denying access to different functions.

## 2.03 MECHANICAL SPECIFICATIONS

A. The Digital Recorder must have the following mechanical specifications:

1. Unit Dimensions (H x W x I	D) 2.63" x 14.25" x 16.25"
	67 mm x 362 mm x 413 mm
2. Unit Weight	9.5 lbs.
	4.3 Kg

## 2.04 ELECTRICAL POWER REQUIREMENTS

- A. The Digital Recorder must have the following electrical specifications:
  - 1. Power Requirement......12 VDC, 5A

## 2.05 ENVIRONMENTAL CONDITIONS

A. The Digital Recorder shall be designed to meet the following environmental conditions:

- 4. Safety .....cUL, UL 60950

# PART 3 – EXECUTION

# 3.01 EXAMINATION

- A. Submission of a proposal confirms that the contract documents and site conditions are accepted without qualifications unless exceptions are specifically noted.
- B. The site shall be visited on a regular basis to appraise ongoing progress of other trades and contractors, make allowances for all ongoing work, and coordinate the requirements of this contract in a timely manner.
- C. The Embedded Digital Recorder must be inspected before installation, and shall be free of any cosmetic defects or damage.

## **3.02 PREPARATION**

A. Prior to installation, The Embedded Digital Recorder shall be configured and tested in accordance with the manufacturer's instructions.

## 3.03 INSTALLATION

- A. The Embedded Digital Recorder must be installed, programmed, and tested in accordance with the manufacturer's instructions.
  - 1. In order to ensure a complete, functional Embedded Digital Recorder, for bidding purposes, where information is not available from the Owner upon request, the worst-case condition shall be assumed.
  - 2. Interfaces shall be coordinated with the Owner's representative, where appropriate.
  - 3. All necessary back boxes, racks, connectors, supports, conduit, cable, and wire must be furnished and installed to provide a complete and reliable Embedded

Digital Recorder installation. Exact location of all boxes, conduit, and wiring runs shall be presented to the Owner for approval in advance of any installation.

4. All conduit, cable, and wire shall be installed parallel and square with building lines, including raised floor areas. Conduit fill shall not exceed forty percent (40%). All wires shall be gathered and tied up to create an orderly installation.

### 3.04 TESTING AND CERTIFICATION

- A. The Contractor shall demonstrate the functionality of the Embedded Digital Recorder upon completion of installation, documenting the result of all tests and providing these results to the Owner. The Embedded Digital Recorder shall be tested in accordance with the following:
  - 1. The Contractor shall conduct a complete inspection and test of all installed Embedded Digital Recorder equipment. This includes testing and verifying operation with connected equipment.
  - 2. The Contractor shall provide staff to test all devices and all operational features of the system for witness by the Owner's representative and the Authority Having jurisdiction. All testing must be witnessed by the Owner's representative, prior to acceptance.
  - 3. The testing and certification shall take place as follows:
    - a. The Embedded Digital Recorder shall be tested in conjunction with the manufacturer's representative.
    - b. All deficiencies noted in the above test shall be corrected.
    - c. Test results shall be submitted to the consultant or Owner's representative.
    - d. The test and correction of any deficiencies shall be witnessed by the owner's representative, and note.
    - e. The Owner's representative shall accept the system.
    - f. The system test shall be witnessed by the Authority Having Jurisdiction. Any deficiencies noted during the testing must be corrected.
  - 4. A letter of certification shall be provided to indicate that the tests have been performed, and all devices are operational.

## END OF SECTION

## Brief Specification

The Embedded Digital Recorder shall offer the latest in digital technology, providing unparalleled stability, security, and ease of use, with advanced algorithms, fast capture rates, and a Graphical User Interface (GUI). Available in 4, 8, and 16 channel configurations with recording of up to 400 ips PAL (480 ips NTSC). The combination of multiplexing, motion detection, audio, image rates and remote notification technologies shall provide an extremely flexible and reliable system. The user must have the ability to view the recorded details both locally and remotely. The Embedded Digital Recorder shall consist of a digital server that supports remote access using a PC web browser. The four (4) input digital recorder shall record at a rate of 100 images per second (ips), the eight (8) input digital recorder shall offer recording options of 200 ips, and the sixteen (16) input digital recorder shall offer recording options of 400 ips. The digital recorder shall utilize H.264 image compression, and shall allow the user to adjust the resolution, quality, sensitivity, and number of images per second each camera will record. These adjustments shall be configurable per video input. The digital recorder shall offer 500 Gigabytes to 1.0Terabyte, 2.0 Terabytes and up to 4.0 Terabytes, depending on model. All hard disks shall be enclosed in the server chassis. Two internal 10/100 Network Interface Cards (NIC) shall be standard. The digital recorder shall have the ability to easily backup important video to an external media location. The unit must not stop recording during the backup process, and to ensure the integrity of data, the digital recorder shall use a watermark process. The digital recorder shall include backup viewer software, allowing the user to playback the exported video in its proprietary format on a PC. The 4, 8 & 16ch digital recorder must include a DVD-RW drive as standard allowing for up to 4.7 Gigabytes of video data to be stored on each DVD. The outputs shall be programmable to sequence through 1, 4, 9 or 16 cameras. The digital recorder must include a System log to record and display information pertaining to user logins, digital recorder reboots, and other related information. The digital recorder shall include a User Management Console, which allows the user to create, edit, and delete user accounts. Each account can be assigned different privileges that limit the usage of the system. The digital recorder shall include a hidden camera feature, which allows an administrator to hide certain cameras from the

Spot monitor. The 4, 8, & 16 input digital recorder shall include four (4) sensor inputs, for use with devices such as motion detectors, glass breakage alarms, door and window sensors, etc. The four (4) eight (8) and (16) input digital recorder shall include a single relay control output, used to trigger devices such as warning sirens, phone dialers, lights, and any other relay activated devices. The digital recorder shall include the capability of recording four (4) channel of "Line-In" type audio. The digital recorder shall allow for user definable, descriptive camera names of up to eight (8) alpha-numeric characters. To optimize the clarity and detail of recorded video, the digital recorder shall have the ability to adjust each video input's brightness, contrast, hue and tint. The user must be able to easily return the video settings to the system's default settings. The digital recorder shall include the option of displaying the associated video full screen upon a motion or sensor event. The digital recorder shall include the predefined pre-alarm of five (5) seconds and post-alarm recording, which must record video for a specified time before and/or after a motion or sensor alarm has occurred. The post-alarm time period must be selectable

from one (5) to ninety nine (180) seconds. The digital recorder shall incorporate a way to record both continuously and by motion. The digital recorder must include a video loss alarm function to allow an alarm event to occur when a camera loses signal for any reason (e.g. power failure, cable being cut, camera damage, etc.) When a video loss event occurs, there must be a means to activate an alarm output. The digital recorder must include the capability to notify across a LAN to a client PC when an alarm is detected on the unit. The operator shall have the ability to stop, play forward and backward, frame by frame or real speed, the video that streams across. The remote application must constantly monitor for a signal from the digital server. An alarm beep at the DVR must also be activated to alert the user. The digital recorder shall incorporate an internal RS-485 adapter, with the ability to control multiple pan/tilt/zoom (PTZ) cameras. Depending on the model, control must include multiple pan, tilt, zoom, and focus speeds, iris control (including return to auto-iris), focus control (including return to auto-focus), programming presets, and viewing presets. The digital recorder shall support the VCL and MAXPRO PTZ protocols. The digital recorder shall include play controls to playback the recorded video either forward or reverse and multiple speeds. The digital recorder shall allow for the remote exporting of single images in the JPEG file format, and saving video clips in an AVI format. This shall allow compatibility with any PC that supports these file formats. AVI files exported from the digital recorder must be automatically watermarked to verify the authenticity of the clip, and ensure they have not been tampered with or edited in any way. The digital recorder shall incorporate hardware watchdog circuitry to restart the unit in the event of a hardware lockup. The remote viewing application shall allow a user to operate and configure the digital recorder remotely, and must connect using standard TCP/IP protocol. The remote application shall provide the user with many of the features and functions available at the local digital server. The remote features and functions must include viewing live video, searching through archived video, exporting images and video clips, and most setup functions. The remote video software shall allow up to ten (10) users to simultaneously connect to a single digital server. Each user can perform functions on the unit and not effect the other users. The unit shall only allow one user to access the setup and PTZ functions at any given time. To ensure that only authorized personnel are allowed to log in to the digital server, the remote video software shall utilize user accounts with assigned privileges, allowing or denving access to different functions. The Embedded Digital Recorder shall be the Honeywell HREP2 Performance Series or equivalent.