

Specificații tehnice

[Acest tabel va fi completat de către ofertant în coloanele 2, 3, 4, 6, 7, iar de către autoritatea contractantă – în coloanele 1, 5]

Numărul procedurii de achiziție: ocds-b3wdp1-MD-1759748336741
Obiectul de achiziției: Comparator video-spectral pentru controlul de frontieră pentru linia II

Denumirea bunurilor	Denumirea modelului bunului	Țara de origine	Producătorul	Specificarea tehnică deplină solicitată de către autoritatea contractantă	Specificarea tehnică deplină propusă de către ofertant	Standarde de referință
1	2	3	4	5	6	7
Complex hardware-software destinat verificării detaliate a autenticității documentelor de călătorie. Comparator video-spectral pentru controlul de frontieră pentru linia II	VSC90 MOBILE UNIT	UK	Foster + Freeman Ltd.	Conform specificațiilor din caietul de sarcini anexat	VSC90 MOBILE UNIT (VSC90/MOBILE) VSC90 MAINFRAME FOR MOBILE (VSC90/MAINFRAME/MOBILE) The VSC90 Mobile is a medium-sized Video Spectral Comparator with embedded computer and integrated touchscreen monitor combining sophisticated multiwavelength digital imaging and illumination technologies with an efficient and easy-to-use software for questioned document examination, particularly practical for mobile deployment. PHYSICAL – VSC Main Unit External Dimensions: - H: 555mm (Max. to top of the integrated touch-screen monitor) - W: 430mm - D: 400mm Internal Base Plate Dimensions: - Max. Width: 404mm - Max. Depth: 326mm Max. Weight: 21kg (VSC main unit with embedded PC and integrated touchscreen monitor) Power Requirements: - 90-264V AC input, 50-60Hz, 130W maximum. - For safe operation, this product must be connected to a mains power outlet with a protective earth contact. - Do NOT connect this product to an incompatible mains power supply. - Note: if the local power supply is potentially unstable, the use of a UPS is recommended. CAMERAS, LENSES AND VIEWING FILTERS Camera	- UKCA, CE (2014/53/EU, 2014/35/EU & 2014/30/EU) and RoHS (EU 2011/65/EU) compliant. - EN61010-1 safety standard for laboratory equipment compliant. - EN 61326-1:2013 Electrical equipment for measurement,

				<ul style="list-style-type: none"> - Image sensor: 1/2.8" Sony Starvis 2 CMOS sensor - Next-Generation Vis-IR Camera: 350–1100 nm spectral range. - Optimized for multi-spectral document inspection with a high-sensitivity sensor that uses back-illuminated structure for better performance in low light, especially in the IR waveband. - Wide dynamic range functionality: Enhances image exposure by reducing overblown highlights and improving visibility in darker areas. - Spot focus and exposure modes: Allows for precise imaging of regions of interest. - Twin-lens 30x zoom system: Delivers precision with autofocus, continuous, and discrete magnification capabilities. - Colour imaging possible even with the IR Cut filter removed, alongside traditional monochrome imaging. - Up to 57 lp/mm (line pairs per millimetre) spatial resolution: Demonstrates the camera's ability to resolve fine details and critical information in every image. <p>Field of View</p> <ul style="list-style-type: none"> - Static Minimum Field of View: 3.6 x 2.0 mm - Static Maximum Field of View: 216 x 120 mm - Enhanced Maximum Field of View: 314 x 174 mm (with the Transmitted light base removed) <p>On-screen Magnification</p> <ul style="list-style-type: none"> - Up to 70x (+/- 5%, when Display Resolution set to 1920 x 1080 on 17" FHD Touchscreen Monitor, with display scaling set to 100%) <p>High-Precision Continuous Zoom Lens with additional automatic additional Lens</p> <ul style="list-style-type: none"> - Optical zoom: 30x - High-Precision optical zoom lens with an extended continuous zoom range. Lens produces high resolution images across the entire field of view with significantly improved distortion correction. - Automatic and manual control of Focus and Iris. <p>Camera Viewing Filters</p> <ul style="list-style-type: none"> - 12 x Long Pass filters: 570nm, 590nm, 610nm, 630nm, 645nm, 665nm, 695nm, 715nm, 725nm, 780nm, 850nm, 1000nm - Visible light Bandpass filter - Independent IR-Cut filter <p>ILLUMINATION SOURCES</p> <p>VSC90 LED illumination sources are selected to provide optimum compatibility with the system's integral imaging filters. LED/Filtration compatibility is a critical factor in fluorescence imaging because it directly affects the excitation efficiency, signal-to-noise ratio, and the ability to selectively excite specific document security features or inks.</p> <p>Incident Flood Illumination (All LED)</p>	<p>control and laboratory use – EMC requirements – Part 1: General.</p> <ul style="list-style-type: none"> - EN62471 photobiological safety of lamps compliant. - FCC Electromagnetic Compatibility – FCC 47 CFR Part 15C (Intentional Radiators). - FCC ICES-003 Informational Technology Equipment (including digital apparatus). - Foster & Freeman are ISO 9001:2015 (Quality Management System) and ISO 14001:20
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				<ul style="list-style-type: none"> - White - IR: 780nm, 850nm, 940nm, 980nm <p>Incident UV Illumination (All LED)</p> <ul style="list-style-type: none"> - Long-wave (UV-A): 365nm - Mid-wave (UV-B): 308nm +/- 4 nm tolerance - Short-wave (UV-C): 255nm +/- 4 nm tolerance <p>Transmitted Illumination (All LED)</p> <ul style="list-style-type: none"> - Flood lighting: White; IR 850nm; Long-wave UV (UV-A) 365nm - Spot lighting: White; IR 780nm and 850nm <p>Oblique / Side Illumination (All LED)</p> <ul style="list-style-type: none"> - White and IR 850nm - Independent left and right illumination, with manual height adjustment <p>Spot Illumination (All LED)</p> <ul style="list-style-type: none"> - Set of discrete LED illumination for IR fluorescence examination. - 10 x LED Array: White, Violet (410nm), Blue (445nm), Blue Green (475nm), Cyan (500nm), Green (525nm), Amber (590nm), Red (640nm), Deep Red (660nm), Far Red (740nm). - WaveTrim® trimming filters – optimised for fluorescence examination. - 1023 x multi waveband combinations - Multiple LEDs can be used at the same time. (Note: reduced intensity beyond 3 wavebands). - Fluorescence mode – a suitable camera filter will be automatically used with each light source for examining IR fluorescence. - Fluorescence scan <p>OVD Illumination (All LED)</p> <ul style="list-style-type: none"> - Combined Circular and vertical format White LED array, consisting of 42 x LEDs arranged around the machine. - Improved User Interface – Intuitive, specific angles and scientific. - The OVD scanning allows automatic OVD light sources cycling continuously and seamlessly. - For scanning of Diffractive Optically- variable Devices (DOVD), Hologram, Micro-hologram and Kinegram® security features - Video capture of DOVD security features with playback synchronized to live image viewing with the same pace of the OVD illumination cycling. - Composite image generation. - Mosaic image generation. <p>Coaxial Illumination (All LED)</p> <ul style="list-style-type: none"> - White LED array with configurable illumination modes: Onaxis (Centre), Off-Axis-Left, Off-Axis-Right. - New enlarged, segmented Coaxial Illumination Array (Patent GB2602793A) allows larger imaging area for the 	15 (Environmental management system) certified. Environmental Condition s:
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				<p>examination of laminates and surface features (e.g. Tactile features, Surface embossing etc.) to be imaged. Single Onaxis segment feature (Centre) improves coaxial contrast, whilst Off-axis segment features allow sub-surface laserengraved features to be visualised.</p> <ul style="list-style-type: none"> - Maximum Coaxial Illumination area: 41mm x 15mm <p>Anti-Stokes Illumination (All LED)</p> <ul style="list-style-type: none"> - High intensity built-in broadband 980nm LED illumination. - Continuous illumination (with preset working time and cooling interval) for live imaging of the 3rd-Level IR Luminescent security features. <p>3D Imaging Illumination (All LED)</p> <ul style="list-style-type: none"> - Available in White, illuminating from four different angles. - For enhanced visible 3D imaging using Photometric stereo technique*. <p>*If the optional 3D Imaging Software Module (Part Number: VSC/3D) is ordered.</p> <p>Phosphorescence Illumination (All LED)</p> <ul style="list-style-type: none"> - Pulsed Long-wave (UV-A) 365nm LEDs. - For luminescence decay imaging of document security features including phosphorescent fibres, inks etc. <p>HARDWARE – VSC Main Unit</p> <p>Embedded RFID reader for Electronic Machine-Readable Travel Document (e-MRTD) examination.</p> <p>Removable Transmitted light base providing larger working distance and field of view, allowing access for thick items.</p> <p>Access flaps are positional with safety interlock</p> <ul style="list-style-type: none"> - Front and side flaps remain in position when opened to accommodate larger documents. - To prevent light leakage, provide end-user optical safety for UV-B and UV-C light sources, and block stray light. <p>Safety and Compliance:</p> <ul style="list-style-type: none"> - UKCA, CE (2014/53/EU, 2014/35/EU & 2014/30/EU) and RoHS (EU 2011/65/EU) compliant. - EN61010-1 safety standard for laboratory equipment compliant. - EN 61326-1:2013 Electrical equipment for measurement, control and laboratory use – EMC requirements – Part 1: General. - EN62471 photobiological safety of lamps compliant. - FCC Electromagnetic Compatibility – FCC 47 CFR Part 15C (Intentional Radiators). - FCC ICES-003 Informational Technology Equipment (including digital apparatus). - Foster & Freeman are ISO 9001:2015 (Quality Management System) and ISO 14001:2015 (Environmental management system) certified. <p>Environmental Conditions:</p> <ul style="list-style-type: none"> - For indoor or in vehicle use only. - Ambient operating temperature range: 5°C to 40°C. 	
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				<ul style="list-style-type: none"> - Yellow colour enhancement to easily visualise the Machine Identification Code (MIC) or Counterfeit Protection System (CPS) codes (i.e. the yellow dots) commonly found in colour laser printed documents. - Digital zoom up to 16x. <p>Image Comparison</p> <ul style="list-style-type: none"> - Facilities to compare “Live vs Stored” images or “Stored vs Stored” images side-by-side, superimposed or subtracted, split, strobed. <p>Image Annotation and Measurement</p> <ul style="list-style-type: none"> - Annotate captured images with text, shapes, and visual markers etc. - Calibrated measurement of length, angle, diameter & area of a circular / ellipse etc. - The measurement objects and values can be embedded in the saved image. <p>Image Enhancement</p> <ul style="list-style-type: none"> - Digital image enhancement functions including Brightness, Contrast, Gamma, Hue, Saturation, Sharpen, Histogram Equalization, etc. <p>High Dynamic Range (HDR) Imaging</p> <ul style="list-style-type: none"> - Capture and display a wide range of luminance values in a single image. - Boost image quality by reducing under/over exposure, noise, artifacts, and colour shifts in challenging lighting conditions. <p>Focal Plane Merging / Extended Depth of Field</p> <ul style="list-style-type: none"> - Image processing module to retain sharp focus across the entirety of the image of document with large thickness difference. - Particularly useful when lens zoom is adjusted very high to observe fine details where the Depth of Field (DOF) substantially decreases. <p>Latent Image Viewer</p> <ul style="list-style-type: none"> - For visualising “Latent Image” security feature. - With enhancement tools to increase contrast. <p>Barcode Reader</p> <ul style="list-style-type: none"> - 1D and 2D Barcode reading and analysis functionality including identity document barcode format PDF417. <p>MRZ recognition and Data reading</p> <ul style="list-style-type: none"> - Automatically locate, extract, and decode the ICAO Machine Readable Zone (MRZ) data from a machinereadable zone on Passports, Visas, ID cards. - Data reading using Optical Character Recognition (OCR) technique, and data validation with discrepancies or errors being automatically flagged for review. <p>Automation</p> <ul style="list-style-type: none"> - The “Quick Capture” function enables programmable examination settings and store of images for flexible rapid document examination and images capture. 	
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				<p>- User-defined Macros creation to automate common examination routines. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE</p> <p>VSC90 STANDARD ACCESSORIES (VSC90/ACC)</p> <ul style="list-style-type: none"> - 2 x Paperweights - Document Centring Assembly - Optical Variable Ink (OVI) Viewer - Mouse Mat - Cleaning Cloth/Wipes - Training Sample (Tutorial Sample) set <p>VSC90 WIRELESS KEYBOARD MOUSE (VSC90/WKM)</p> <p>USB3 FLASH DRIVE (FLASH-DRIVE128GB-USB3)- USB Memory Stick (containing Software Installer, Digital User Manual and Quick Start Guide Documents etc.)</p> <p>VSC90 MOBILE TOUCH SCREEN (284-190-AS-01)</p> <ul style="list-style-type: none"> - Seamless Integrated Touchscreen setup - Full HD 17" (1920 x 1080) Monitor - Adjustable Tilttable Stand with Concealed Cabling <p>VSC EXTENDED RFID CAPABILITY (VSC/RFID)A software module to facilitate Basic Access Control (BAC) and Password Authenticated Connection Establishment (PACE) with Extended Access Control (EAC) capability for ePassport chip data reading and authentication including Terminal Authentication (TA), Passive Authentication (PA), Active Authentication (AA), and Chip Authentication (CA) allowing user to view all personal data contained on the RFID chip of an Electronic Machine-Readable Travel Document (eMRTD). This is valid for VSC9000, VSC900, VSC90, VSC8000/HS and VSC/PDI+</p> <p>5 YEAR EXTENDED WARRANTY IN ADVANCE 2 years standard plus 3 additional years</p>	
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