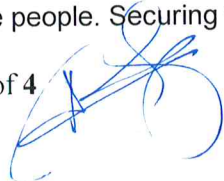


**HEADQUARTERS
PHILIPPINE ARMY
OFFICE OF THE ARMY QUARTERMASTER
Fort Andres Bonifacio, Metro Manila**

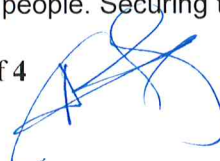
**TEST PARAMETERS
MILITARY BINOCULAR, COMPACT, PHILIPPINE ARMY, MODEL 1**

Parameters	QM SPEC NR IE – 22MBCM1 dated 07 August 2017	Classification of Defects	
		Major	Minor
Material	The housing or chassis materials shall be fabricated with Polycarbonate, Magnesium alloy or Aluminum alloy	X	
Coating	It shall have a protective robust NBR (Nitrile Butadiene Rubber) armor coating.	X	
Color	Olive Drab	X	
Operating Requirements			
Magnification	8x	X	
Objective Lens Diameter, mm	30 to 42	X	
Field of View at 1,000 meters	340 ft (104 meters) minimum	X	
Exit Pupil diameter ,mm	3.0 (minimum)	X	
Eye relief Distance	11mm to 21mm		X
	It shall provide adequate field of view to users wearing eyeglasses and shall have more comfort on observation.	X	
Mechanical Requirements			
Focusing System	Focusing system of the Binocular shall be Central Focus or an Individual focusing system in the ocular lens.	X	
Diopter Adjustment	The Binocular shall have a Diopter adjustment for focusing adjustment	X	
Eyecups	The binocular shall be a Twist-up eyecup or folded down eyecups.	X	
	It shall be made of silicone with ergonomic design		X
Interpupillary Distance (IPD)	It shall have a hinge system between two barrels allowing the eyecups and the ocular lenses closer or further apart.	X	
Optical Requirements	It shall provide brighter, color rich and sharper edges of the periphery. The user shall not experience eyestrain and headaches on prolong use of the binocular.	X	
	It shall have a complete circular shape of the exit pupil	X	
Prism	Porro	X	
Glass type	BAK – 4	X	
Refractive Index	1.55 (minimum)		X

Parameters	QM SPEC NR IE – 22MBCM1 dated 07 August 2017	Classification of Defects	
		Major	Minor
Optical Coatings	Shall be fully-multi coated anti-reflections coating both inner and outer surfaces of the lenses	X	
	It shall provide vivid, brighter and sharper images.	X	
	The images shall show no sign of "ghost images" of bright objects, dim picture, washed-out image and poor observing experience.	X	
Environmental Requirements			
Shockproofness	Shall withstand the shocks and jars without damage, no derangement of any of the parts and functions and impairment of its adjustments beyond acceptable limits.	X	
Waterproof	The binocular shall be capable of being submerged into water at certain depth in specified time limits where it will not damage or adversely affect performance of the binocular directly or indirectly	X	
Fogproof	It shall be sealed with O-ring and purged with nitrogen or argon gas	X	
	It shall show no sign of fogging on the lens after a complete immersion in water.	X	
Low and High Temperature	The Binocular shall show no sign of glass breakage or other physical failure and shall meet all requirements after having been exposed to a required minimum low temperature and a minimum required high temperature.	X	
	It shall deliver consistently sharp, clear and fog-free images after exposure on the required temperature.	X	
Corrosion Resistant	The binocular shall show no evidence of corrosion that will damage or adversely affect performance of the binocular directly or indirectly after undergoing a simulated seawater environment prescribed in the test procedure.	X	
Size Requirements			
Dimension (H x W x L)	11.5 ± 1.5 cm x 17.5 ± 1.5 cm x 6.5 ± 1.5 cm		X
Weight, g	680 (maximum)	X	
Accessories			
Carrying Case	It shall be provided with an olive drab soft carrying case	X	
	It shall have sliding shoulder pad and can be adjusted for length with the buckles. The back side of the case shall have a loop that enables the case to attach to the hip		X
	The lid that folds over the top of the case is closed with a plastic quick release buckle which can be adjusted for length.		X
	It shall have a single elasticated pocket as placement of few small items.		X



Parameters	QM SPEC NR IE – 22MBCM1 dated 07 August 2017	Classification of Defects	
		Major	Minor
	The binocular shall fit perfectly to the bag and shall be easy to close the lid with all lens cover attached to the binocular.	X	
Rain Guards	The binocular shall have a soft rubber rain guard as cover of the ocular lens	X	
	The rain guard shall have flexible bridge in between the two cups which takes up the slack and can fix to the eyecups regardless of the IPD setting		X
	It shall have two loops (one on each cup) for attachment to the neck strap.		X
Lens Cover	The binocular shall have objective lens cover	X	
	It shall be soft rubber or plastic objective lens cover on tethered caps that loops over the objective end of the tubular barrel or attached to the central pivot of a binocular.		X
Neck Strap/Harness	Shall have a neck strap/harness attachment.	X	
	The strap shall have slider plastic buckle that enables to adjust the length of the strap.		X
	It shall be attach/connect to the binocular by a quick release buckle.		X
	The color shall be similar to the exterior body of the binocular.		X
Cleaning Kit	The binocular shall be provided with a cleaning kit.	X	
	The cleaning kit shall consist with a minimum of lens cleaning brush, lens cleaning solution and a microfiber cleaning cloth.		X
Instructions and Warranty Information	Shall have an Instruction and warranty information	X	
	The manual shall contain all the basic information/instruction needed, which includes but not limited to the parts of the binocular, instructions for use, setting the diopter, focusing, eyecup adjustment, cleaning as well as care and storage.		X
Special Features			
Mil-dot Reticle	The binocular shall include a built-in horizontal and vertical scale reticle.	X	
Construction and Design			
	The objective lens shall be well protected by a protruding body that shield from potential scratching, rain and dust.	X	
Serial Number	The binocular shall have serial number that is permanent and visible on the item.	X	
Hinges	The hinges of the binoculars shall be so designed as to permit the adjustment of the interocular distance.	X	



Parameters	QM SPEC NR IE – 22MBCM1 dated 07 August 2017	Classification of Defects	
		Major	Minor
	It shall be fitted and adjusted with sufficient tightness, and the hinge lubricant shall be of such consistency that the interpupillary distance shall be maintained.	X	
Eyepiece	Shall be of rotating focusing type and shall be capable of being focused independently.	X	
Focusing system	The focus system shall be adjusted only once to each user's individual acuity.		X
Workmanship	Shall be well-finished, well cleaned and free from any defects which may affect the serviceability, appearance of the finished item	X	
	The binocular shall be free from foreign particle or dust on the inside part of the binocular that affect the observation of the user.	X	
Packaging	Each Binocular together with the carrying case and accessories shall be packed in a carton box with information label of the manufacturer and essential information or description about the item.		X
TOTAL TEST POINTS		42	17


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