● important, ○ helpful, - not necessary

Universities	Aviation Academies	Naval Academies	Military Academies	Part Numbers	Component
●	●	●	●	Part #: SkyRadar PSR-Scopes	**FreeScopes Module, including:** Virtual Radar Control Center, allowing control of the SkyRadar Base-Unit and visualizing the Scopes (A-Scope, B-Scope, PPI). The Control Center reads out Q and I data, provided from the Base Unit or stored data. It includes several filters (e.g., STC) and allows manipulations on CW and Doppler based signals. The control center can be used by several users concurrently. They are enabled to do different manipulations per computer. The module is based on HTML-5 Technologies (JavaScript, Canvas, JSON-LD)
●	●	●	●	Part #: SkyRadar PSR-Base	**PSR Base Module, including:** one (1) exchangeable pair of horn antennas default operation 24 GHz, allowing for a resolution of 4cm at 10m) one (1) digital signal processing unit (DSP) one (1) transceiver , carrier frequency 24 GHz, output power between 0 and 2 mW. one (1) motor control unit (only activated when rotary unit is added) one (1) cable set.
●	●	●	●	Part #: SkyRadar PSR-Rotary Tripod	**The rotary tripod includes the following:** One (1) Tripod with implemented DC-Motor and slip ring One (1) Power Supply Unit with DC cable One (1) AC-Supply cable One (1) Compass, 75Hz update frequency One (1) License to use the motor control unit which is embedded in the base unit
●	●	●	●	Part #: SkyRadar PSR-Parabol	**The parabolic reflector includes the following:** One (1) calibrated reflector One (1) mounting with adjustable slope angle
●	●	●	●	Part #: SkyRadar PSR-Cloud	**The Cloud server includes the following:** One (1) Hardware server with LINUX operating system, WLAN to connect with the Base Unit and Ethernet bridge to interface customer network. One (1) SkyRadar Cloud Server software to manage traffic and to allow connection to customer LMS (SCORM-based)
○	●	○	●	*Part #: SkyRadar PSR-MTI*	**PSR Target Tracking Unit for fully automated target detection (MTD) and tracking (MTI), including** One (1) license for Target Tracking software activation (software deployment into the hardware factory-provided). Software allows for target indication (square boxes and afterglow). methods: moving target detection and moving target indication.
-	-	-	●	*Part #: SkyRadar PSR-Security*	**Security Module, including** One (1) Computer-controlled hardware jammer for Electronic Counter Measure (ECM) One (1) set of Electronic Counter Counter Measure Functionalities (ECCM) One (1) Antenna One (1) Laptop with SkyRadar Security Software installed One (1) software license
●	●	●	●	Part #: SkyRadar FMCW Base	**FMCW Base Module, including:** one (1) phased array antenna one (1) digital signal processing unit (DSP), 250k Samples one (1) FMCW transceiver one (1) motor control unit (only activated when rotary unit is added) One (1) Analysis, Visualization and Control Software, supporting, Fast Fourier Transform snd the Modes Doppler, Chart, FSK and FMCW. It also includes the software for control and visualisation for the SAR extension. One (1) Laptop Computer (responding to current state-of-the-art) One (1) cable set.
●	○	●	●	*Part #: SkyRadar PSR-SAR*	**Synthetic Aperture Radar Module, including** one (1) linear axis driven by a DC motor one (1) control unit providing one (1) motor control unit and software one (1) Wireless LAN connection with the Laptop Computer one (1) cable set.

Universi-ties	Aviation Academies	Naval Academies	Military Academies	Part Numbers	Component
●	●	●	●	*Part #: SkyRadar PSR-Target*	**Mobile Target Positioning System**
					The chain-driven remote controlled moveable device for inside applications is able to move freely in the laboratory without any of the limitations of a target table or a rail system. The subsystem can position targets precisely through a comfortable remote control device. In contrast to traditional target tables, the target is not spatially limited. The system is able to carry various radar targets that are easily connectable to the target system without the requirement of any tools. Different targets representing various radar cross-sections (RCS) are supplied with the Radar Training System, including a corner reflector (retro-reflector) consisting of three mutually perpendicular, intersecting flat surfaces. The system comprises a rotary mounting, able to rotate the reflectors representing various cross sections.
–	–	●	O	*Part #: SkyRadar PSR-Vessel*	**Remote Controlled Ship Model**
					Ship equipped with diamond shaped corner reflectors and allows for monitoring trajectory and for conducting experiments e.g. the entrance into a port.
O	●	–	●	*Part #: SkyRadar PSR-Quad*	**Remote Controlled Quadcopter**
●	●	●	●	Part #: SkyRadar Phased Array Control	**Phased Array Beam Controller designed with 4 Yagi-Uda Antennae that form an array.**
					One (1) graphical user interface to control the beam
					Four (4) Yagi-Uda Antennae
					One (1) Phased Array Antenna Controller
					One (1) Connection Leads and Accessories
					One (1) Tripod
					One (1) field measurement device

Universities	Aviation Academies	Naval Academies	Military Academies	Part Numbers	Component
○	●	○	●	*Part #: SkyRadar SSR-Exp*	**Secondary Surveillance Radar Experimenter (under development)**
					Set of digital impulse synthesizers, which provide these impulse patterns continuously, allowing for comfortable visualization through an oscilloscope. When using each of the interrogation-modes, the signals are triggered independently on control center and aircraft side through up to 252 synthesizers, potentially used as control centers or aircrafts). The differences between interrogation- and response impulses can be clearly visualized for the different operating modes.
					including:
					One (1) unit, representing the ground station, equipped with a power unit, a main board and a communication board. It further includes preinstalled all necessary software for signal generation and the user interface. One (1) unit, representing the transponder, equipped with a power unit, a main board and a communication board. It further includes preinstalled all necessary software for signal generation and the user interface. Optionally: up to 252 additional boards can be ordered, each either in the role of the ground station or in the role of an aircraft's transponder. One (1) operating interface, allowing for a) Generation of all possible impulse patterns for Mode S Secondary Surveillance Radars and of all respective transponder responses, including IFF messages. b) Visualization of Signal Flow for Interrogation and Response in standards for Mark X (Mode A/C) and Mark XII (Mode S) in a comfortable Graphical User Interface. Signal quality complies with ICAO Annex 10 to the Convention on International Civil Aviation, Volume IV (Surveillance and Collision Avoidance Systems) with respect to impulse duration, tolerances, pauses and flank slopes.
○	●	○	●	*Part #: SkyRadar SSR-Box*	**Extension boxes representing Transponders or ground stations**
○	●	○	●	*Part #: SkyRadar SSR-ADS-B*	**ADS-B experimenter**
					One (1) Laptop
					One (1) ADS-B sender, representing the aircraft
					One (1) Radar Field Analyzer
					One (1) ADS-B receiver (linked to an analysis environment)
					One (1) Portable Outdoor Antenna
					One (1) Analysis and Visualization Environment
●	●	●	●		**Transport**
●	●	●	●		**Training**
				Total (for one unit each):	