

Art. 2 The Ex-tariffs below the respective legal acts indicated are hereby revoked:

NCM	Nº Ex	DESCRIPTION
8443.99.49	1	Mechanisms printing with mechanical and electronic devices suitable for use in thermal transfer printer solid ink or solid resin having sublimation ink (dye sublimation) containing plastic roller with gears on the inner surface, and a radio frequency sensor (RFID) to communication with the printer, polymeric film provided with alternating sections of yellow, magenta, cyan, black and transparent panel, card cleaning, and roller cleaning adesivado.
8471.50.10	16	Data processing units for agronomic machines equipped with J1939 diagnostic port, used for data transfer to "host" controller in real time connected to a 9-pin diagnostic port, equipped with internal antenna, 2 standard CAN ports J1939 of 250Kbps up to 1Mbps, 80MHz processor, memory unit 128kb of RAM, the internal memory capacity of 16GB, operating temperature between -40 and 85 degrees Celsius, containing input unit and output.
8471.49.00	8	open connection server with 2U height, with 240TB of storage capacity, 24 hard drives 10TB each, equipped with two power supplies.
8517.62.59	59	Equipment with fixed configuration inspection data network packets "ethernet", able to identify, filter and route data network packets "ethernet" from layer 2 to layer 4 on all ports of the equipment up to 2 RUs ( rack unit) 48 port 1/4 + doors 40Gbps to 10Gbps, 40Gbps ports 32, ports 32 or 100 Gbps ports 64 100Gbps, consuming no more than 1.070W with all ports simultaneously connected with the intention of adding all the data network
8471.70.19	1	Trays of custom servers for use in network racks in telecom applications with power distribution capacity of + 48v, containing 15 units of rigid magnetic disks (HDD) storage capacity from 4 to 32TB.

Article 3 The following Ex-tariffs are included in the respective legal acts indicated:

NCM	Nº Ex	DESCRIPTION
8443.99.49	2	Mechanisms printing with mechanical and electronic devices suitable for use in thermal transfer printer solid ink or solid resin having sublimation ink (dye sublimation) containing plastic roller with gears on the inner surface, and a radio frequency sensor (RFID) to communication with the printer, polymeric film provided with alternating sections of yellow, magenta, cyan, black and transparent panel adesivado roller cleaning, with or without cleaning card.
8517.62.91	17	data processing transmission units for agronomic machines equipped with J1939 diagnostic port, used for data transfer to "host" controller in real time connected to a 9-pin diagnostic port, equipped with internal antenna, 2 door CAN standard J1939 250Kbps to 1Mbps, 80MHz processor, memory unit 128kb of RAM, the internal memory capacity of 16GB, operating temperature between -40 and 85 degrees Celsius, containing input unit and output.
8517.62.59	84	Equipment with fixed configuration inspection data network packets "ethernet", able to identify, filter and route data network packets "ethernet" from layer 2 to layer 4 on all ports of the equipment up to 2 RUs ( unit rack) with ports 1 48/10 / 25GBPS to 8 ports + 40/100 Gbps, 40 Gbps ports 32, ports 32 or 100 Gbps ports 64 100Gbps, consuming no more than 1.070W with all ports simultaneously connected with the intention to add all network data.
8471.70.19	2	Trays custom servers for network use racks in telecommunication applications, with power distribution capacity of 48V, containing 15 units of rigid magnetic disks (HDD) disposed on the upper surface of storage capacity between 4 and 32TB each.

Art. 1 The Ex-tariffs on ICT Goods listed in the Single Annex to this Resolution are included...

Single Annex

NCM	Nº Ex	DESCRIPTION
8443.99.29	9	Thermoplastic paper support brackets injected into high impact polystyrene mostly with minimum tolerance of 0.025 mm, with holes, latches and pins, sliding linear guide included in injected plastic and sheet metal, galvanized steel roller coated with rubber ethylene propylene, rectified for paper transport, equipped with helical springs and rollers used for paper storage to the printing process, for exclusive use in inkjet printers.
8443.99.29	10	plastic containers injected polypropylene containing couplings and locks, endowed absorber felt liquid surplus ink discharge printing process for exclusive use in inkjet printers.
8443.99.29	11	Sets low pressure vacuum generators around -50kpa injected thermoplastic ABS mostly containing a blade (squeegee) thermoplastic elastomer provided with helical springs, elastomeric tube, gears and rollers used in the supply / discharge process printing system for multifunction printers and inkjet printers.
8443.99.29	12	plastic sets injected into high impact polystyrene mostly for automatic reversal, maximum size A4, during the printing process, fitted with metal sheet steel, chrome-free with dimension of 235.5 x 27.8mm and tolerance minimum 0.03 mm made of progressive tool, consisting of rollers in plastic injected, side mechanical actuators injected ABS plastic, gears and helical springs for exclusive use for inkjet printers.
8443.99.29	13	Carriers injected thermoplastic ABS, equipped with latches and hooks, metal rollers constructed of stainless steel with a maximum tolerance of 0.02mm and plastic injected into polyacetal rollers consisting of springs used to support the paper during the printing process, for use unique in inkjet printers.
8471.90.90	13	inspection equipment of railway lines with integrated packages for processing, analysis, comparisons and report printing - composed of sets of "hardware" and "software" for the processing, analysis and integration returning parameters such as conditions of the road and the tracks, gauge, geometry, DGPS location, wear the tracks, geometry variations, trend curves and structural flaws, among others.
8473.30.41	2	Motherboards with H61 chipset with "socket" for 1155 family processors with memory capacity: "Dual Channel" DDR3 1066/1333 / 1.60MHz, with integrated graphics processors, two USB 2.0 connectors, 1 audio connector on the panel front, the "hardware" design: micro-ATX (19 x 17cm), the unit value (CIF) not exceeding US \$ 153.40.

8473.30.41	3	Motherboards with H81 chipset, and "socket" for family processors 1150, memory "Dual Channel" DDR3 1066/1333 / 1.600MHz, with integrated graphics processors. Connectors: 1 x USB 2.0; 2 USB 2.0; 1 x USB 3.0; 2 USB 3.0; 1 audio connector on the front panel "form factor" micro-ATX (19 x 17cm), the unit value (CIF) not exceeding US \$ 153.40.
8473.30.99	27	dedicated offices in height 7U for installation in "rack" for up to eight processing modules with 2 processors and up to 8 BOSS type disks HDD, SSD or NVM and, or 4 processing modules with 4 processors and up to 10 discs BOSS, HDD or SSD NVMe or 7 data storage modules with up to 16 disks of the HDD or SSD type, powered by sources of 3.000W to 6, with the processing modules (2 or 4 processors) and storage can be used together, respecting the physical capacity of the office, with support up to 4 "Ethernet switches" with up to 16 internal connections to the processing modules and external outputs from 10 to 100GbE, and up to 2 "switches" connection "Fiber Channel" from 8 internal ports and up to 16 external connections to 32Gbps.
8517.62.39	19	Selectors wavelength (WSS) "trueFlex Nano" 1 x 9, based on an optical platform LCoS low profile, designed to provide scalability and flexibility of DWDM networks, through its operating characteristics without a defined grid, which enables the transmission and supercanais of channels with variable coherent modulation formats such as QPSK and / or QAM, among others, compliant with ITU grid in the C-band offers flexibility 6,25GHz or less granularity also allows individual control channel attenuation and scalable up to 8 directions in architecture "broadcast-and-select".
8517.62.41	7	portable radio transceivers, capable of integrating wireless mesh network to work with data transmission, voice and video with single or multiple frequency in the frequency range between 900MHz and 5.8GHz MIMO or SISO, supporting open standard protocols type IEEE 802.11b / g / n and optionally the IEEE 802.11a protocol configurations up to four access points per frequency to other devices such as laptops, smartphones and tablets, equipped with one or up to 6 antennas in omnidirectional radiation in the frequency range between 900MHz and 5.8GHz and gain between 2 and 6dBi; cable "Ethernet outdoor" shielded connectors with IP67 protection class; may contain type connectors "Squid Amphenol" with Ethernet and USB ports, and power supply PoE injector type.
8517.62.55	4	Optical network equipment type client terminals presented in plastic enclosures with one or more ports LAN RJ45 Ethernet, optical port XPON (EPON / GPON) with capacity of up to 2,5Gbps "downlink" and even 1,25Gbps to "uplink" interface integrated wireless "Wi-Fi" in the 2.4GHz band or Dual 2.4 / 5GHz, and may contain additional ports for POTS telephony, for delivering internet access and digital TV services and / or telephony architecture network FTTH ( "Fiber to the Home"), the unit value (CIF) not exceeding R \$ 187,18.
8517.62.59	83	optical passive network with gigabit capacity terminals for connection to fiber optic services; ports "pon" and "LAN" 10/100/1000 Gigabit rate of "downlink" to 2.5Gbp and "uplink" of 1.25Gbp, operating temperature between 0 to 45 degrees Celsius, the unit value (CIF) not exceeding R \$ 66.81.
8517.62.62	18	interconnection point operators (POI), designed to provide RF attenuation (RF) and / or the RF signal splitting a radio base station or other sources coupled in a 'sub-rack' of 19 inches in size 440 x 212 x 366mm, holds up to 8 cards, with each card providing two equal attenuation of RF services or modes 2 6 RF services capable of mitigating 12 or 16 inputs with 40dB to 10dB options 16 or 24 outputs.
8517.62.62	19	High frequency remote units (HP-F) or (HPRU) to optical conversion to RF (radio frequency), with 1 to 2 frequency bands for (HPRU) and / or 1 to 2 3GPP frequency bands (HP-F) with frequency capability in the range of 700 to 2.700MHz, mounted on metal chassis with dimensions of 400 x 125 x 300mm (HPRU) and 400 x 146 x 300mm (HP-F) with RF antenna interface 4.3-10 female, with a maximum power consumption of 250W power and 110 to 240V, 50 / 60Hz and 48V DC.
8517.62.62	20	optical expansion units (EU-O) with 6 RJ45 inputs for Ethernet interface and up to 6 optical output ports, 8 interfaces SFP 10Mbps, 2 for AU / Cascade / Virtual Baseband and 6 optical outputs, 6 SFP + modules for distribution Cell signals in the coverage area, often in the capacity range of 360 to 3.800MHz, maximum power consumption 50W, power 100 to 240V, 50 / 60Hz and 48V DC.
8517.62.62	21	access units (AU) to RF signal interface (radio frequency) up to 4 3GPP bands with optical connector type SFP + and RF access interface unit Female QMA often capacity in the range 700 to 2.700MHz, maximal power 80W, power 100 to 240V, 50 / 60Hz and +/- 48V DC.
8517.62.62	22	remote nano force units (NPRU) for converting Ethernet signals to RF (radio frequency), up to four frequency bands 3GPP, with maximum power of + 15dBm per band interface to female RFQMA antenna with maximum power consumption 65W often capacity in the range of 700 to 2.700MHz.
8517.62.62	23	ethernet expansion units (I-E) interface between access unit (AU) and drive remote nano force (NPRU) with up to 12 Ethernet RJ45 outputs and 2 SFP + for connection to AU and "master slave", 6 modules SFP + cell distribution for signals within range, frequently capacity in the range of 700 to 2.700MHz, maximum power consumption of 100W and +/- 56V DC power supply.
8517.62.62	24	Modules GSM / GPRS to receive and send information and Command fleet management system; communication with CAN 2.0B, with or without coupling resistor, transmission rate (baud rate) up to 1Mbps; Quad-band GSM 850/900/1800/1900 MHz GPRS "multi-slot" class 12; with SIM 1.8 V, 3 V - "cMiniSIM" or "ComponentSIM", between 5 and 40VDC voltage, operating temperature between -40 and +75 degrees Celsius, IP65.
8517.70.10	18	Equipment containing integrated set of transmission and reception of signals "surfbeam" 2 (Etria), power horn (small antenna used to transmit waves between the transmitter and / or receiver and the parabolic reflector) and the components of the wave guide along with the circuits that convert satellite signals of ka band and the band signals used for cable transmission between the external antenna and the satellite modem with transmission frequency band 28.1 to 30GHz, adjustable 100MHz steps up to instantaneous bandwidth of 500MHz.
8517.70.10	19	Equipment modulators / demodulators high speed compact to support internet communications high speed satellite, satellite modem "surfbeam" 2, is the network termination device for receiving the broadband network service to be installed on the end user, with speeds to the user: delivery channel: configurable up to 40Mbps and return channel: configurable up to 10Mbps, power 100 to 240Vac; 50 to 60Hz.

8517.70.10	20	Equipment modulators / demodulators high speed compact to support internet communications high speed satellite, satellite modem "surfbeam" 2+, is the network termination device for receiving the broadband network service to be installed on the end user with integrated wireless router with speeds the user: delivery channel: configurable up to 60Mbps and return channel: configurable up to 20Mbps, power 100 to 240Vac; 50 to 60Hz.
8517.70.10	21	Circuit Boards assembled with multiplexing function and de-multiplexing or up to 40 optical channels from one optical channel frequency multifrequency ITU-T G.694 standard, with capabilities of monitoring optical signal and performance monitoring alarms, events, temperature and output power MON interface for external monitoring of the multiplexed signal and integrated power supply.
8517.70.10	22	Circuit Boards assembled with standard optical signal conversion function SONET / SDH / Ethernet / FC optical signals, WDM (Wavelength Division Multiplexing) OTUk accordance with ITU-T recommendations, containing encapsulating module and mapping signals operation control module of the board modules, information gathering function as performance alarms, events, temperature, voltage sensing and integrated power supply, the unit value (CIF) not
8517.70.99	51	Parabolic reflectors of 0.75m for transmission and reception of satellite signals, operating in satellite Ka band frequency range, containing maximum physical dimensions, including enhanced features from the edge of 77 cm and 72cm in the main axis in the minor axis, projected opening the elliptical reflector not less than 73.5 x 63,5cm, with the reflector surface profile in parabolic shape, with a focal length of the parabolic reflector of 52cm, containing frequency (GHz) receiving 17.7 to 20.2 and transmission from 28.1 to 30, nominal EIRP 48,4dBW, G / T nominal 18,5dB / K, gain receiving 40,6dBi of the antenna, the minimum 19,95GHz and 44,4dBi transmission least 29 , 75GHz, the unit value (CIF) not exceeding US \$ 77.72
8517.70.99	52	1.2m parabolic reflectors for transmission and reception of satellite signals, operating on satellite frequency band and Ka band mounting bracket set in steel, containing "hardware" support designed for satellite transceiver connection to the arm and boom support tria rear boom arm for connection to the reflector, with a focal length of 96.52cm opening height designed 120,65cm opening width designed 120,50cm, dimension 137.50 vertical axis, the horizontal axis dimension of 123.50, 0cm offset paraboloid, of the reflector surface and optical tolerance reflector surface 120,65cm loaded, the maximum positional tolerance under load mass 120,50cm, maximum angular displacement of $\pm 0.70$ , maximum angular displacement $\pm 1$ degree, a unit value (CIF) not exceeding US \$ 2037.92.
8517.70.99	53	mounting bracket sets in steel, containing "hardware" support designed for satellite transceiver connection to the arm boom and back support tria to boom arm connection to the reflector, (kit, ka, 75cm, Etria, dk gray, PBI) containing rods for mounting on a wall or roof, 5.08 inch cane, 2 adjustable supports, allowing lifting mast 0-65 degrees unit value (CIF) not exceeding US \$ 56.75.
8517.70.99	54	parabolic reflector assembly including sets of rods 0.75m mast rear mounting structure and azimuth drive systems, elevation and inclination for transmission and reception of satellite signals, the unit value (CIF) not exceeding US \$ 108.83
8536.50.90	88	Key electromagnetic commercially called "reed switch" tension less than or equal to 250V, suitable for mounting on a printed circuit board.
8536.90.40	30	Connectors for printed circuit, the terminal type with two or more terminals (poles), being individual or block used for electrical power leads, relay outputs, sensor inputs and / or digital keys, by means of wires / cables between the product (electronic controller), equipment / external metallic conductive connection of each terminal equipment mounted in insulating material (polymer) having the addition of flame retardant compounds.
8537.10.20	46	Control panels for electric pallet truck drive with 350Ah operation capacity with 8:23 position connectors with dimensions of height 328,7mm, 385mm long and 306mm wide, equipped with traction control module, control module lifting of the tower, and ventilation system 183,5m <sup>3</sup> / h.
8537.10.20	47	static transfer switches, microprocessor for electric or alternating current power distribution control, for use in environments of "Data Center" model "Liebert sts2" phase, capacity 100, 250, 400, 600, 800 or 1,000th, rated voltage 208, 220, 240, 380, 400, 415, 480 or 600VAC, 60Hz frequency, equipped with 5 or 6 breakers molded case "plug-in" equipped with "display" LCD "" touchscreen "and" Optimized Transfer " allows the same transfer conditions outside +180 to -180 degrees phase with UL.
8541.40.32	115	bifacial photovoltaic modules, intended for electric power generation, provided with monocrystalline silicon cells with a maximum rated power (STC) equal to 425Wp, efficiency equal to 19% (189,58Wp / m <sup>2</sup> ), dimensions 2.131 x 1.052 x 35mm , with unit CIF value not exceeding R \$ 512.56.
8541.40.32	116	bifacial photovoltaic solar modules, for the generation of electricity, endowed with monocrystalline silicon cells with a maximum rated power (STC) equal to 430Wp, efficiency equal to 19.2% (191,81Wp / m <sup>2</sup> ) dimensions of 2,131 x 1,052 x 35mm, with a useful life of 30-year warranty, with unit CIF value not exceeding R \$ 518.59.
8541.40.32	117	bifacial photovoltaic solar modules, for the generation of electricity, endowed with monocrystalline silicon cells with a maximum rated power (STC) equal to 435Wp, efficiency equal to 19.4% (194,04Wp / m <sup>2</sup> ), dimensions of 2.131 x 1.052 x 35mm, with unit CIF value not exceeding R \$ 524.62.
8541.40.32	118	monofaciais photovoltaic modules for electricity generation, provided with monocrystalline silicon cells with maximum rated power (STC) equal to 425Wp, 19.1% conversion efficiency (191.01 Wp / m <sup>2</sup> ), dimensions of 2,115 x 1,052 x 35mm, unit CIF value not exceeding R \$ 486.74.
8541.40.32	119	monofaciais photovoltaic modules for electricity generation, provided with monocrystalline silicon cells with maximum rated power (STC) equal to 430Wp, conversion efficiency of 19.3% (193.26 Wp / m <sup>2</sup> ), dimensions of 2,115 x 1,052 x 35mm, unit CIF value not exceeding R \$ 492.44.
8541.40.32	120	monofaciais photovoltaic modules for electricity generation, provided with monocrystalline silicon cells with maximum rated power (STC) equal to 435Wp, 19.6% conversion efficiency (195.51 Wp / m <sup>2</sup> ), dimensions of 2,115 x 1,052 x 35mm, unit CIF value not exceeding R \$ 498.17.
8541.40.32	121	monofaciais photovoltaic modules for electricity generation, provided with monocrystalline silicon cells with maximum rated power (STC) equal to 440Wp, 19.8% conversion efficiency (197.75 Wp / m <sup>2</sup> ), dimensions of 2,115 x 1,052 x 35mm, unit CIF value not exceeding R \$ 503.89.

8541.40.32	122	photovoltaic modules, bifacial intended for electric power generation, provided with monocrystalline silicon cells with the front maximum rated power (STC) equal to 395Wp and efficiency equal to 19.29% (192,94Wp / m <sup>2</sup> ), the same size 2,031 x 1,008 x 30 mm, with a unit CIF value not exceeding US \$ 452.09.
8541.40.32	123	photovoltaic modules, bifacial intended for electric power generation, provided with monocrystalline silicon cells with the front maximum rated power (STC) equal to 400Wp and efficiency equal to 19.54% (195,38Wp / m <sup>2</sup> ), the same size 2,031 x 1,008 x 30 mm, with a unit CIF value not exceeding US \$ 461.24.
8541.40.32	124	photovoltaic modules, bifacial intended for electric power generation, provided with monocrystalline silicon cells with the front maximum rated power (STC) equal to 405Wp and efficiency equal to 19.78% (197,83Wp / m <sup>2</sup> ), the same size 2,031 x 1,008 x 30 mm, with a unit CIF value not exceeding US \$ 471.34.
8541.40.32	125	photovoltaic modules, bifacial, for the generation of electricity, endowed with monocrystalline silicon cells with the front maximum rated power (STC) is equal 525Wp and efficiency equal to 20.76% (207,61Wp / m <sup>2</sup> ) dimension equal to 2.230 x 1,134 x 35mm.
8541.40.32	126	photovoltaic modules, bifacial, for the generation of electricity, endowed with monocrystalline silicon cells with the front maximum rated power (STC) is equal 530Wp and efficiency equal to 20.96% (206,58Wp / m <sup>2</sup> ) dimension equal to 2.230 x 1,134 x 35mm.
8541.40.32	127	monofaciais photovoltaic module manufactured using polycrystalline silicon cells; maximum dimensions of 1960 x 992 x 35mm, with nominal power 335W and efficiency of 17.23% (172,30Wp / m <sup>2</sup> ) with value (CIF) not exceeding US \$ 328.88.
8541.40.32	128	bifacial photovoltaic modules, intended for power generation with high efficiency, provided with monocrystalline silicon cells, with a maximum rated power (STC) equal to 360Wp, dimensions 2020 x 996 x 30mm, efficiency equal to 17.9% (178,93Wp / m <sup>2</sup> ), with a unit CIF value not exceeding US \$ 419.71.
8541.40.32	129	bifacial photovoltaic modules, intended for power generation with high efficiency, provided with monocrystalline silicon cells, with a maximum rated power (STC) equal to 365Wp, dimensions 2020 x 996 x 30mm, efficiency equal to 18.1% (181,42Wp / m <sup>2</sup> ), with a unit CIF value not exceeding US \$ 425.54.
8541.40.32	130	bifacial photovoltaic modules, intended for power generation with high efficiency, provided with monocrystalline silicon cells, with a maximum rated power (STC) equal to 370Wp, dimensions 2020 x 996 x 30mm, efficiency equal to 18.4% (183,90Wp / m <sup>2</sup> ), with a unit CIF value not exceeding US \$ 431.37.
8541.40.32	131	bifacial photovoltaic modules, intended for power generation with high efficiency, provided with monocrystalline silicon cells, with a maximum rated power (STC) equal to 375Wp, dimensions 2020 x 996 x 30mm, efficiency equal to 18.6% (186,39Wp / m <sup>2</sup> ), with a unit CIF value not exceeding US \$ 437.20.
8541.40.32	132	bifacial photovoltaic modules, intended for power generation with high efficiency, provided with monocrystalline silicon cells, with a maximum rated power (STC) equal to 380Wp, dimensions 2020 x 996 x 30mm, efficiency equal to 18.9% (188,87Wp / m <sup>2</sup> ), with a unit CIF value not exceeding US \$ 443.03.
8541.40.32	133	bifacial photovoltaic modules, intended for power generation with high efficiency, provided with monocrystalline silicon cells, with a maximum rated power (STC) equal to 385Wp, dimensions 2020 x 996 x 30mm, efficiency equal to 19.1% (191,36Wp / m <sup>2</sup> ), with a unit CIF value not exceeding US \$ 448.86.
8541.40.32	134	Photovoltaic solar modules for power generation with high efficiency, provided with monocrystalline silicon cells, with a maximum rated power (STC) equal to 365Wp, dimensions 2004 x 996 x 35mm, efficiency equal to 18.3% (182,87Wp / m <sup>2</sup> ), with a unit CIF value not exceeding US \$ 412.14.
8541.40.32	135	Photovoltaic solar modules for power generation with high efficiency, provided with monocrystalline silicon cells, with a maximum rated power (STC) equal to 370Wp, dimensions 2004 x 996 x 35mm, efficiency equal to 18.5% (185,37Wp / m <sup>2</sup> ), with a unit CIF value not exceeding US \$ 417.79.
8541.40.32	136	Photovoltaic solar modules for power generation with high efficiency, provided with monocrystalline silicon cells, with a maximum rated power (STC) equal to 375Wp, dimensions 2004 x 996 x 35mm, efficiency equal to 18.8% (187,88Wp / m <sup>2</sup> ), with a unit CIF value not exceeding US \$ 423.43.
8541.40.32	137	Photovoltaic solar modules for power generation with high efficiency, provided with monocrystalline silicon cells, with a maximum rated power (STC) equal to 380Wp, dimensions 2004 x 996 x 35mm, efficiency equal to 19.0% (190,38Wp / m <sup>2</sup> ), with a unit CIF value not exceeding US \$ 429.08.
8541.40.32	138	Photovoltaic solar modules for power generation with high efficiency, provided with monocrystalline silicon cells, with a maximum rated power (STC) equal to 385Wp, dimensions 2004 x 996 x 35mm, efficiency equal to 19.3% (192,89Wp / m <sup>2</sup> ), with a unit CIF value not exceeding US \$ 434.73.
8541.40.32	139	monofaciais solar photovoltaic modules, intended for electric power generation, provided with monocrystalline silicon cells with a maximum rated power (STC) equal to 19.7% and efficiency 430Wp (196,70Wp / m <sup>2</sup> ) with dimensions of 2102 x 1040 x 35mm for maximum system voltage of 1.500V with CIF unit value not exceeding US \$ 404.04.
8541.40.32	140	monofaciais solar photovoltaic modules, intended for electric power generation, provided with monocrystalline silicon cells with a maximum rated power (STC) equal to 19.9% and efficiency 435Wp (198,99Wp / m <sup>2</sup> ) with dimensions of 2102 x 1040 x 35mm for maximum system voltage of 1.500V with CIF unit value not exceeding US \$ 408.74.
8541.40.32	141	monofaciais solar photovoltaic modules, intended for electric power generation, provided with monocrystalline silicon cells with a maximum rated power (STC) equal to 20.1% and efficiency 440Wp (201,27Wp / m <sup>2</sup> ) with dimensions of 2102 x 1040 x 35mm for maximum system voltage of 1.500V with CIF unit value not exceeding US \$ 413.44.
8541.40.32	142	monofaciais solar photovoltaic modules, intended for electric power generation, provided with monocrystalline silicon cells with a maximum rated power (STC) equal to 20.4% and efficiency 445Wp (203,56Wp / m <sup>2</sup> ) with dimensions of 2102 x 1040 x 35mm for maximum system voltage of 1.500V with CIF unit value not exceeding US \$ 418.14.
8541.40.32	143	monofaciais solar photovoltaic modules, intended for electric power generation, provided with monocrystalline silicon cells with a maximum rated power (STC) equal to 20.6% and efficiency 450Wp (205,85Wp / m <sup>2</sup> ) with dimensions of 2102 x 1040 x 35mm for maximum system voltage of 1.500V with CIF unit value not exceeding US \$ 422.83.
8541.40.32	144	photovoltaic modules, bifacial intended for electric power generation, provided with monocrystalline silicon cells with a maximum rated power (STC) equal to 19.5% and efficiency 430Wp (194,74Wp / m <sup>2</sup> ) with dimensions of 2111 x 1046 x 30 mm for maximum system voltage of 1.500V with CIF unit value not exceeding US \$ 418.54.

8541.40.32	145	photovoltaic modules, bifacial, for the generation of electricity, endowed with monocrystalline silicon cells with a maximum rated power (STC) equal to 19.7% and efficiency 435Wp (197,00Wp / m <sup>2</sup> ) with dimensions of 2111 × 1046 × 30 mm for maximum system voltage of 1.500V with CIF unit value not exceeding US \$ 423.40.
8541.40.32	146	photovoltaic modules, bifacial intended for electric power generation, provided with monocrystalline silicon cells with a maximum rated power (STC) equal to 19.9% and efficiency 440Wp (199,27Wp / m <sup>2</sup> ) with dimensions of 2111 × 1046 × 30 mm for maximum system voltage of 1.500V with CIF unit value not exceeding US \$ 428.27.
8541.40.32	147	photovoltaic modules, bifacial intended for electric power generation, provided with monocrystalline silicon cells with a maximum rated power (STC) equal to 20.2% and efficiency 445Wp (201,53Wp / m <sup>2</sup> ) with dimensions of 2111 × 1046 × 30 mm for maximum system voltage of 1.500V with CIF unit value not exceeding US \$ 433.14.
8541.40.32	148	photovoltaic modules, intended for electric power generation, provided with monocrystalline silicon cells with maximum power rating Pmax (STC) of 425Wp nominal efficiency of 19.6%, 195,9W power per m <sup>2</sup> , dimensions of 2178 x 996 x 40mm with CIF unit value not exceeding US \$ 436.21.
8541.40.32	149	photovoltaic modules, intended for electric power generation, provided with monocrystalline silicon cells with maximum power rating Pmax (STC) of 430Wp nominal efficiency of 19.8%, 198,2W power per m <sup>2</sup> , dimensions of 2178 x 996 x 40mm with CIF unit value not exceeding US \$ 441.98.
8541.40.32	150	photovoltaic modules, intended for electric power generation, provided with monocrystalline silicon cells with maximum power rating Pmax (STC) of 435Wp nominal efficiency of 20.1%, 200,5W power per m <sup>2</sup> , dimensions of 2178 x 996 x 40mm, with CIF unit value not exceeding US \$ 447.12.
8541.40.32	151	photovoltaic modules, intended for electric power generation, provided with monocrystalline silicon cells with maximum power rating Pmax (STC) of 440Wp nominal efficiency of 20.3%, 202,8W power per m <sup>2</sup> , dimensions of 2178 x 996 x 40mm with CIF unit value not exceeding US \$ 452.26.
8541.40.32	152	photovoltaic modules, intended for electric power generation, provided with monocrystalline silicon cells with maximum power rating Pmax (STC) of 445Wp nominal efficiency of 20.5%, 205,1W power per m <sup>2</sup> , dimensions of 2178 x 996 x 40mm with CIF unit value not exceeding US \$ 457.40.
8541.40.32	153	monofaciais PV modules of 435Wp power rating (STC) with monocrystalline cells arrangement in series of up to 1.500Vdc for solar energy, size 2115 x 1052 x 35mm, IP68 degree of protection, conversion efficiency of 19.6% (195,51Wp / m <sup>2</sup> ), with a unit CIF value not exceeding US \$ 434.28.
8541.40.32	154	BIPV solar photovoltaic modules with dual function of generating electricity and coating walls, may be fixed directly on masonry, with customized dimensions up to 4000 x 1.250mm, with light transmittance equal to or higher than 85% rated power exceeding 136Wp / m <sup>2</sup> , efficiency equal to or greater than 13.95%, including junction box with IP67 protection.
8541.40.32	155	transparent photovoltaic solar modules, with a double layer of glass for use as sunlight roofing on roofs, corridors, patios, greenhouses and generate electricity with light transmittance of 40%, nominal dimensions of 1,662 x 990 x 5 mm, rated power 180W and maximum efficiency of 10.4%.
8541.40.32	156	bifacial photovoltaic modules, intended for electric power generation, provided monocrystalline silicon cells with high efficiency, maximum rated power (STC) equal to 440Wp, efficiency equal to 20.2% (202,43Wp / m <sup>2</sup> ), dimensions 2.094 x 1038 x 35mm, with unit CIF value not exceeding R \$ 494.86.
8541.40.32	157	bifacial photovoltaic solar modules, for the generation of electricity, endowed with monocrystalline silicon cells with high efficiency, maximum rated power (STC) equal to 425Wp, efficiency equal to 19.6% (195,53Wp / m <sup>2</sup> ), dimensions 2094 x 1038 x 35mm, with unit CIF value not exceeding R \$ 477.99.
8541.40.32	158	bifacial photovoltaic solar modules, for the generation of electricity, endowed with monocrystalline silicon cells with high efficiency, maximum rated power (STC) equal to 430Wp, efficiency equal to 19.8% (197,83Wp / m <sup>2</sup> ), dimensions 2094 x 1038 x 35mm, with unit CIF value not exceeding R \$ 483.61.
8541.40.32	159	bifacial photovoltaic solar modules, for the generation of electricity, endowed with monocrystalline silicon cells with high efficiency, maximum rated power (STC) equal to 435Wp, efficiency equal to 20.0% (200,13Wp / m <sup>2</sup> ), dimensions 2094 x 1038 x 35mm, with unit CIF value not exceeding R \$ 489.23.
8541.40.32	160	bifacial photovoltaic solar modules, for the generation of electricity, endowed with monocrystalline silicon cells with high efficiency, maximum rated power (STC) equal to 450Wp, efficiency equal to 20.7% (207,03Wp / m <sup>2</sup> ), dimensions 2,094 x 1,038 x 35mm.
8541.40.32	161	bifacial photovoltaic solar modules, for the generation of electricity, endowed with monocrystalline silicon cells with high efficiency, maximum rated power (STC) equal to 455Wp, efficiency equal to 20.9% (209,33Wp / m <sup>2</sup> ), dimensions 2,094 x 1,038 x 35mm.
8541.40.32	162	bifacial photovoltaic modules, intended for electric power generation, provided with monocrystalline silicon half-cells with high efficiency, maximum rated power (STC) equal to 445Wp, efficiency equal to 20.5% (204,73Wp / m <sup>2</sup> ) dimensions 2.094 x 1.038 x 35mm, with CIF unit value not exceeding US \$ 500.48.
8541.40.32	163	monofaciais photovoltaic modules for power generation with monocrystalline silicon cells and nominal power (STC) equal to 385Wp and efficiency equal to 19.21% (192.12 Wp / m <sup>2</sup> ), with a maximum voltage greater than or equal system 1.500vdc , dimensions 2,000 x 1,002 x 30 mm, protection index ip68, value (CIF) no more than R \$ 453.83.
8541.40.32	164	monofaciais photovoltaic modules for power generation with monocrystalline silicon cells and nominal power (STC) equal to 400Wp and efficiency equal to 20.61% (206.15 Wp / m <sup>2</sup> ), with a maximum voltage greater than or equal system 1.500vdc , dimensions 1956 x 992 x 35mm ip68 protection index value (CIF) no more than R \$ 460.06.
8541.40.32	165	BIPV photovoltaic glasses with the dual function of coating facades and generate electric power, with a degree of transparency ranging from 0 to 30% dimensions of 1,245 x 635mm, nominal peak power ranging from 22 to 46Wp, Pmax - 0 temperature coefficient, 19% per degree Celsius, including junction box with IP65.
8541.40.32	166	bifacial photovoltaic solar modules, for the generation of electricity composed of monocrystalline silicon cells with a maximum rated power (STC) equal to 500Wp (650Wp bifacial with 30% gain), efficiency equal to 20.3% (202,55Wp / m <sup>2</sup> ) for maximum system voltage equal to 1.500V, dimensions of 2,240 x 1,102 x 30 mm, with a unit CIF value not exceeding US \$ 620.83.

8541.40.32	167	photovoltaic modules, monofaciais intended for electricity generation, consisting of monocrystalline silicon cells with a maximum rated power (STC) equal to 19.5% and efficiency 480Wp (195,14Wp / m <sup>2</sup> ) to over the maximum system voltage or equal to 1.500V, 12AWG IP68 connector and connecting cables, with a unit CIF not exceeding US \$ 542.89.
8541.40.32	168	photovoltaic modules, monofaciais intended for electricity generation, consisting of monocrystalline silicon cells with a maximum rated power (STC) equal to 19.9% and efficiency 490Wp (199,21Wp / m <sup>2</sup> ) to over the maximum system voltage or equal to 1.500V, 12AWG IP68 connector and connecting cables, with a unit CIF not exceeding US \$ 553.79.
8541.40.32	169	photovoltaic modules, bifacial intended for electricity generation, consisting of monocrystalline silicon cells with a maximum rated power (STC) equal to 440Wp (550WP bifacial with gain of 25%), and efficiency equal to 20.2% (202, 43Wp / m <sup>2</sup> ) for maximum system voltage greater than or equal to 1.500V, dimensions 2.094 x 1.038 x 35mm, with CIF unit value not exceeding US \$ 619.94.
8541.40.32	170	photovoltaic modules, bifacial intended for electricity generation, consisting of monocrystalline silicon cells with a maximum rated power (STC) equal to 445Wp (556Wp with bifacial gain of 25%) indicated with a positive tolerance and efficiency equal to 20.5 % (204,73Wp / m <sup>2</sup> ) for maximum system voltage greater than or equal to 1.500V, dimensions 2.094 x 1.038 x 35mm, with CIF unit value not exceeding US \$ 626.98.
8541.40.32	171	photovoltaic modules, bifacial intended for electricity generation, consisting of monocrystalline silicon cells with a maximum rated power (STC) equal to 450Wp (563Wp with bifacial gain of 25%), and efficiency equal to 20.7% (207, 03Wp / m <sup>2</sup> ) for maximum system voltage greater than or equal to 1.500V, dimensions 2.094 x 1.038 x 35mm.
8541.40.32	172	photovoltaic modules, bifacial intended for electricity generation, consisting of monocrystalline silicon cells with a maximum rated power (STC) equal to 455Wp (569Wp with bifacial gain of 25%), and efficiency equal to 20.9% (209, 33Wp / m <sup>2</sup> ) for maximum system voltage greater than or equal to 1.500V, dimensions 2.094 x 1.038 x 35mm.
8541.40.32	173	bifacial photovoltaic modules for power generation, monocrystalline, with an output (front) exceeding 405Wp with efficiency (front) not less than 19.7% (196,76Wp / m <sup>2</sup> ) with dimensions of 2,038 x 1,010 x 41mm, with unit CIF value not exceeding R \$ 602.44.
8541.40.32	174	bifacial photovoltaic modules for power generation, monocrystalline, with an output (front) exceeding 410Wp with efficiency (front) greater than or equal to 19.9% (199,19Wp / m <sup>2</sup> ) with dimensions of 2,038 x 1,010 x 41mm, with unit CIF value not exceeding R \$ 613.91.
8541.40.32	175	bifacial photovoltaic modules for power generation, monocrystalline, with an output (front) exceeding 415Wp with efficiency (front) not less than 20.2% (201,61Wp / m <sup>2</sup> ) with dimensions of 2,038 x 1,010 x 41mm, with unit CIF value not exceeding R \$ 619.65.
8541.40.32	176	PV modules with channels for water flow, for power generation and heating water, monocrystalline, with output exceeding 125Wp with a thickness of 3mm glass top; with dimensions of 1250 x 650 x 40mm.
8541.40.32	177	photovoltaic modules for generating electrical power, bifacial endowed monocrystalline silicon cells with the front nominal power (STC) equal to 540W and efficiency equal to 20.7% (206,67Wp / m <sup>2</sup> ) for maximum system voltage 1.500V, with dimensions of 2384 x 1096 x 35mm, IP68 rating.
8541.40.32	178	photovoltaic modules for generating electrical power, bifacial endowed monocrystalline silicon cells with the front nominal power (STC) equal to 545W and efficiency equal to 20.9% (208,58Wp / m <sup>2</sup> ) for maximum system voltage 1.500V, with dimensions of 2384 x 1096 x 35mm, IP68 rating.
8541.40.32	179	photovoltaic modules for generating electrical power, bifacial endowed monocrystalline silicon cells with the front nominal power (STC) equal to 550W and efficiency equal to 21.0% (210,50Wp / m <sup>2</sup> ) for maximum system voltage 1.500V, with dimensions of 2384 x 1096 x 35mm, IP68 rating.
8541.40.32	180	monofaciais solar photovoltaic modules for generating electricity, endowed with monofaciais cell monocrystalline silicon, with nominal power (STC) equal to 605W and efficiency 21.4% (210,50Wp / m <sup>2</sup> ) for maximum system voltage of 1.500V, with dimensions of 2172 x 1303 x 35mm, IP68 rating.
8541.40.32	181	photovoltaic modules for generating electrical power, bifacial endowed monocrystalline silicon cells with rated power (STC) equal to 585W and efficiency 20.7% (206,71Wp / m <sup>2</sup> ) for maximum system voltage of 1.500V, with dimensions of 2172 x 1303 x 35mm, IP68 rating.
8541.40.32	182	photovoltaic modules for generating electrical power, bifacial endowed monocrystalline silicon cells with rated power (STC) equal to 590W and efficiency 20.8% (208,47Wp / m <sup>2</sup> ) for maximum system voltage of 1.500V, with dimensions of 2172 x 1303 x 35mm, IP68 rating.
8541.40.32	183	photovoltaic modules for generating electrical power, bifacial endowed monocrystalline silicon cells with rated power (STC) equal to 595W and efficiency 21.0% (210,24Wp / m <sup>2</sup> ) for maximum system voltage of 1.500V, with dimensions of 2172 x 1303 x 35mm, IP68 rating.
8541.40.32	184	photovoltaic modules for generating electrical power, bifacial endowed monocrystalline silicon cells with rated power (STC) equal to 600W and efficiency 21.2% (212,01Wp / m <sup>2</sup> ) for maximum system voltage of 1.500V, with dimensions of 2172 x 1303 x 35mm, IP68 rating.
8541.40.32	185	bifacial photovoltaic modules, solar cells, monocrystalline silicon compounds with nominal power 585W and efficiency equal to 20.7% (206,71Wp / m <sup>2</sup> ) under standard test conditions (STC) to systems with the maximum voltage equal to 1.500V DC and dimensions of 2,172 x 1,303 x 30 mm.
8541.40.32	186	bifacial photovoltaic modules, solar cells, monocrystalline silicon compounds with nominal power 590W and efficiency equal to 20.8% (208,47Wp / m <sup>2</sup> ) under standard test conditions (STC) to systems with the maximum voltage equal to 1.500V DC and dimensions of 2,172 x 1,303 x 30 mm.
8541.40.32	187	bifacial photovoltaic modules, solar cells, monocrystalline silicon compounds with nominal power 595W and efficiency equal to 21.0% (210,24Wp / m <sup>2</sup> ) under standard test conditions (STC) to systems with the maximum voltage equal to 1.500V DC and dimensions of 2,172 x 1,303 x 30 mm.
8541.40.32	188	bifacial photovoltaic modules, solar cells, monocrystalline silicon compounds with nominal power 600W and efficiency equal to 21.2% (212,01Wp / m <sup>2</sup> ) under standard test conditions (STC) to systems with the maximum voltage equal to 1.500V DC and dimensions of 2,172 x 1,303 x 30 mm.

8541.40.32	189	monofaciais photovoltaic modules, solar cells, monocrystalline silicon compounds with nominal power 605W and efficiency equal to 21.4% (213,77Wp / m <sup>2</sup> ) under standard test conditions (STC) to systems with the maximum voltage equal to 1.500V DC and dimensions of 2,172 x 1,303 x 35mm.
8541.40.32	190	photovoltaic modules, consisting of monocrystalline silicon cells, with a maximum total nominal power (STC) equal to the total rated power 155W and equal to 180,23W per m <sup>2</sup> / m <sup>2</sup> , efficiency equal to 18.05%, of dimensions 676 x 1270 x 30mm, for use in systems with a maximum voltage equal to 1.000V, the unit value (CIF) not exceeding US \$ 257.33.
8541.40.32	191	photovoltaic modules, consisting of polycrystalline silicon cells, with a maximum total nominal power (STC) is equal to the nominal total power and 340W per m <sup>2</sup> equal to 171,72W / m <sup>2</sup> , efficiency equal to 17.15%, of dimensions 1.979 x 1.002 x 35mm, for use in systems with a maximum voltage equal to 1.000V, the unit value (CIF) not exceeding US \$ 356.76.
8543.70.99	243	LC modules sampling technology readers nonmagnetic hydrometer to measure (meter), high measurement accuracy, resistant to electromagnetic interference without absorbing impurities without human maintenance, with the possibility of updating the traditional mechanical water meter.
8543.70.99	244	Equipment for mixing and / or processing audio signals, to analog inputs and outputs with frequency response of 20Hz to 20kHz or higher level with maximum variation of + 0.1 / -0.3dB 10Hz to 100kHz and with varying maximum level of + 0 / -3 dB, total harmonic distortion (THD) of input equal to or better than 0.005% at 1 kHz with input level + 20dB, "headroom" greater than or equal to + 24dB (with 1% total harmonic distortion (THD)), the equivalent input noise (EIN) exceeding - 93dBu, circuits without voltage controlled amplifiers (VCAs) with no electrolytic capacitors in the main path of the audio signal.
8543.70.99	245	forensics devices for detecting multispectral latent fingerprints; with "full HD" screen "touchscreen"; multispectral camera with 4K PRO 16.3 MP; with connection capacity "Wi-Fi"; UV lens 30mm F3.5; focusing 4cm to infinity; with digital zoom function; with professional light filters and special and "software" control for multiple resources.
8543.70.99	246	Facial recognition devices equipped with high resolution LCD screen, presence sensor, dual-lens camera 2MP, storage capacity of at least 2.000faces, face recognition up to 0.2s at a distance of 3m designed to support the operating temperature within the range of -30 to 60 degrees Celsius.
8543.70.99	247	search and rescue auxiliary equipment in confined areas, telescopic extender compounds 3m anodized aluminum with removable and supports integrated video camera handle, and can operate with wired and wireless at a distance of 35m, LED lighting board, operating with replaceable batteries, two-way audio with loudspeaker, omnidirectional microphone of high sensitivity condenser, and live broadcast, operating in a temperature range of -10 to 60 degrees Celsius, gyroscope, accelerometer, resolution of "live streaming" of 960s HD (960p double) and video frame rate of 30 frames per second of from 2 x 200 degree field of view, ultra wide-angle lenses with an effective 360 degree coverage 3.4MP image sensor, 1/3 "CMOS sensor 2.2 pixels with classification immersion protection IP68 water.
8543.70.99	248	Equipment, food with 110 to 240VAC, to reduce electricity consumption by air conditioners for reducing the operating time of your compressors, equipped with the following elements contained in plastic case: processor "software" control integrated; Printed circuit board mounted with electronic elements; Two temperature sensors; relay; alarm sound and gauge the working temperature.
8543.70.99	249	pressure transducers for hydraulic brake units of the wind turbine system with a measuring range of 0 to 1.500psi, voltage 9 to 32VDC, electric current of 4 to 20mA, maximum diameter dimensions 18,8mm and 65,4mm length , operating temperature of -40 to 85 degrees Celsius.
9032.89.11	8	electronic control units for 0 voltage regulation to 10V for use in the control of light intensity lamps, able to perform measurement of device power consumption to which it is connected, equipped with an electronic board inside a plastic housing with serial communication via RJ45 to receive presence data, movement and light, by which also sends the measured consumption data. operating voltage range of 100 to 277VAC.
9032.89.89	64	ultrasonic sensors of high precision to the height of the capture function of the board of asphalt pavers or concrete, or the milling drum or blade grader, or blade crawler tractor from the ground acting range of 200 to 1500 mm, 10 to 30V supply voltage, and CANbus communication via the 7-pin bayonet connector device equipped with five ultrasonic transducer and a temperature transducer for compensation in the measurement of weather effects height, body cast aluminum, with approximate weight 2kg, using ISO 11898 protocol, dedicated to the application in automotive equipment.

