



Quotation

Robotics and Automation Products



Offerta Numero: 2019-12211

Revisione Numero: 1

Data: 12/07/2019



Robotics and Automation Products
Sales Department

Grugliasco, 12/07/2019

IIS Gae Aulenti

Alla cortese attenzione: Responsabile Unico del Procedimento **CESARE MOLINARI**

Offerta 2019-12211 - Rev. 1

Con riferimento alla Vostra gradita richiesta, siamo lieti sottoporVi la nostra migliore offerta per la fornitura dei seguenti:

2,00 e.DO with Desk Simulator
2,00 Fieldbus Training

Stefano Mantino
Sales Specialist

A handwritten signature in blue ink, reading "Stefano Mantino", written in a cursive style.

Massimo Calveto
Sales Director

A handwritten signature in blue ink, reading "Massimo Calveto", written in a cursive style.

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Comau S.p.A. a socio unico
Direzione e coordinamento
ex art. 2497 c.c. Fiat Chrysler
Automobiles N.V.



eDo



Configurations

e.DO

Base Configuration

Description	Qty	Part Number
Robot e.DO OffSet & Gripper - 6 axis Robot with Gripper, laterally fixed on base (assembled and tested by COMAU)	2,00	CR82439200_ARM
Standard Warranty e.DO robot	2,00	SWUMP-EDO
Marker holder tool for e.DO	2,00	CR82435500
Desk Simulator for e.DO	2,00	CR17931480

Subtotal Amount (Base Configuration)

€ 19.780,00

Nr. 2,00 e.DO:

Final Discounted Price

€ 18.500,00

Options

Description	Qty	Part Number
Fieldbus Training: Online +1 day @ Comau (final exam included)	2,00	EDO-UPOLCO1

Subtotal Amount (Options)

€ 2.000,00

Total Amount

€ 0,00

NB: nella "Richiesta preventivo per l'acquisto di attrezzature di robotica" il DESK Simulator viene descritto come:

*Software di programmazione per PC che consenta la programmazione in linguaggio PDL2 del robot di cui al puntio precedente, completo di simulazione in 3d del braccio robotico.
Corso sull'uso del software per PDL2.*

Il DESK Simulator da noi offerto non si limita ad essere un software di programmazione, infatti:

è una apparecchiatura elettrica per la simulazione off-line di un Robot Comau; è altresì utilizzabile opzionalmente anche per il controllo di un Robot fisico, come il Robot Comau e.DO. Il Desk Simulator è dotato di 24 Input e 12 Output.

Il prodotto offerto è quindi migliorativo rispetto quello richiesto.



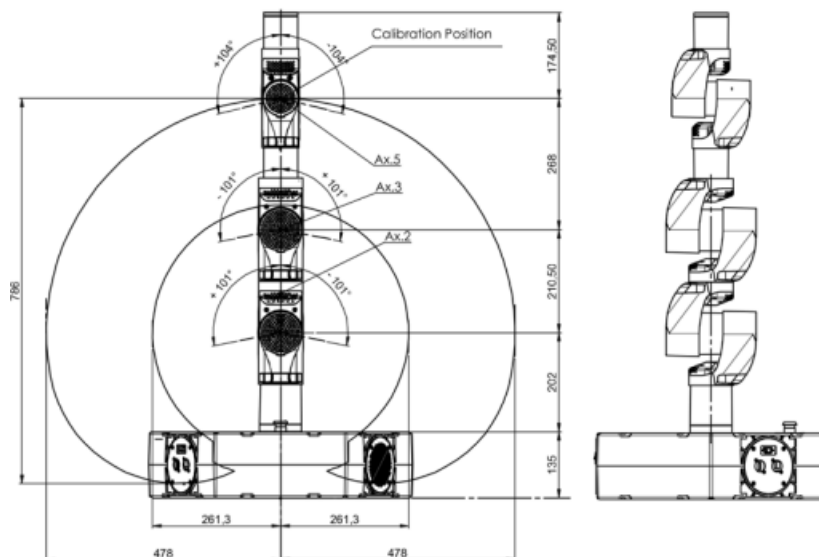
Limiti di Fornitura Robot e.DO 6 assi

Il Robot **e.DO** 6-assi include i seguenti componenti:

- 1 base esagonale in materiale plastico
- 3 giunti grandi (velocità max 38 deg/s, Coppia Statica 17.9 Nm)
- 3 giunti piccoli (velocità max 56 deg/s, Coppia Statica 2.75 Nm)
- 4 staffe grandi in materiale plastico e 2 staffe piccole in materiale plastico
- 1 adattatore staffa grande – giunto piccolo
- 1 adattatore staffa grande – staffa grande
- 1 adattatore base
- Cavi
- Alimentatore esterno universale 12 V con adattatore di potenza
- Scheda Madre Raspberry Pi integrata (Raspbian Jessie 8.0)
- Memory card SD integrata con ISO ed e.DO Control Logic pre-installati
- Connettività Wireless
- Manuale “Get started”.

Il robot è certificato secondo la normativa EN ISO 13482 Personal Care Robots e non può essere utilizzato in linee industriali.

Sono esclusi dallo scopo di fornitura il Tablet e/o Personal Computer.



Specifications		Value
Number of axis		6
Max payload		1 kg
Max reach		478 mm
Stroke (Speed)	Axis 1	+/- 180 ° (38 °/sec)
	Axis 2	+/- 101 ° (38 °/sec)
	Axis 3	+/- 101 ° (38 °/sec)
	Axis 4	+/- 180 ° (56 °/sec)
	Axis 5	+/- 104 ° (56 °/sec)
	Axis 6	+/- 2700 ° (56 °/sec)
Total weight		11,1 kg
Robot arm weight		5,4 kg
Structure material		Ixef 1022
Power source		Universal external power source with 12V power adapter
Connectivity	1 external USB port	
	1 RJ45 Ethernet	
	1 DSub-9 Serial Port	
Motherboard		Raspberry PI running Raspbian Jessie
ROS		Kinetic Kame
Control Logic		Proprietary open-source e.DO
Additional Features		External emergency stop button



Condizioni di Fornitura

RESA:	DAP presso vostra sede
CONSEGNA:	entro il 13 ottobre 2019
PAGAMENTO:	100% a 30 giorni FMDF
IVA:	22% Esclusa e da liquidarsi separatamente a presentazione fattura RD.FM.
GARANZIA:	Come da art. 7 Condizioni Generali
POTENZA ELETTRICA:	100-240Vac monofase 50-60Hz
TRAINING & ASSISTENZA	Esclusa. L'assistenza tecnica e/o il training potranno essere effettuati, se espressamente richiesti, da ns. personale specializzato e verranno fatturati separatamente, alle tariffe UCIMU in vigore al momento delle prestazioni.
DOCUMENTAZIONE	Con il volume di fornitura sarà fornita una copia, come da normative CE in vigore, del set standard di documentazione in formato elettronico in lingua italiana.
PROPRIETÀ DELLA MERCE:	Il prodotto rimane di proprietà COMAU S.p.A. fino al completo pagamento dello stesso.
VALIDITÀ:	La presente offerta è valida per un periodo di 30 giorni dalla data della presente.

Nessun ordine sarà considerato vincolante se non espressamente accettato per iscritto da COMAU.

Per tutto quanto non espressamente menzionato, valgono le “e.DO - Condizioni Generali di Vendita e Fornitura - Robotics and Automation Products”

Per accettare la presente offerta, firmare, datare e ritornare insieme all'ordine di Acquisto

Luogo : _____ Data: _____ Firma: _____



GENERAL TERMS AND CONDITIONS OF SALE FOR COMAU- e-DO EXPERIENCE

PREAMBLE

e.DO is a modular robot designed and developed by Comau with a readable source code. It is designed to stimulate creativity and participation inside and outside a classroom. e.DO integrates and consolidates key skill areas such as Robotics, STEM subjects (Science, Technology, Engineering, Mathematics), Soft Skills and Industrial Culture.

e.DO Experience is an innovative educational platform developed by Comau that combine e.DO robot with laboratories, didactic kit, and learning workshops for teachers, students and young professionals. In particular:

- the **e.DO Learning Center** is an engaging workshop that kids can do at school or in a dedicated venue. Run by a trained facilitator, it leverages an innovative didactic approach designed to motivate and facilitate the concrete learning of robotics and new technologies;

- the **e.DO Lab** is designed to explore teaching tools and techniques that are aligned with the digital transformation that is redefining business and automation, and support educators in deploying innovative teaching methods in the classroom. Using **didApp** supported on a web platform and training packages, teachers can autonomously offer an educational laboratory on robotics at their school or institution;

- the **e.DO Licence** package includes the supply of a technology kit plus training and certification services by Comau.

Art. 1 GENERAL

- 1.1 These General Terms and Conditions (hereinafter "GTC") shall apply to all offers issued by Comau (hereinafter "Offer/s") and contracts or purchase orders (hereinafter collectively "Contract/s") for the supply of the robot e.Do, E.do Learning Center, E.Do Lab, E.do license, E.do app and Comau educational services as training and certification included in the E.do Experience (hereinafter jointly referred as "Product/s") by the Comau company specified in the Offer or in the Contract (hereinafter and above "Comau") to a customer (hereinafter "Customer").
- 1.2 These GTC are an integral and essential part of the Offer and the Contracts.
- 1.3 Notwithstanding anything to the contrary contained in documents issued by the Customer (such as, but not limited to, request for quotations, bidding documents, purchase orders etc.) these GTC shall apply and have priority in case of conflict with any other terms and

conditions unless expressly modified in writing by Comau and the Customer (hereinafter collectively the "Parties").

Art. 2 OFFER AND CHANGES

- 2.1 Prices quoted are valid for the period stated in the Offer. If no period is stated prices will be valid for 30 (thirty) days from the date of the Offer.
- 2.2 Any modification required by the Customer in writing after the date of the Contract will be subject to written agreement between the Parties and will cause contractual adjustments, including prices and delivery dates.
- 2.3 If, after the effective date of the Contract, changes to the Products become necessary due to new laws or regulations, the Parties will agree an equitable adjustment of contractual conditions, including prices and delivery dates.

Art. 3 PRICE AND PAYMENT

- 3.1 Price for the Products is detailed in the Offer and/or in the Contract.
- 3.2 Price is not inclusive of any taxes and levies whatsoever, including withholding tax, and is not inclusive of packaging, transport, insurance, assembly and other possible additional costs.
- 3.3 Unless otherwise expressly agreed in writing between the Parties in the Contract, Customer shall pay the price to Comau in accordance with the terms and conditions stated in the Offer.
- 3.4 In case of late payment Comau shall be entitled to:
 - a) obtain interests from the day on which payment was due. Interests shall be calculated according to applicable law without prejudice to Comau right to claim damages for any greater loss due to the delay in payment; and/or
 - b) suspend, after having notified the Customer in writing, the delivery of the Products or the other activities under the Contract, if any, until he receives payment; and/or
 - c) terminate the Contract by notice in writing to the Customer and claim compensation for the losses incurred.
- 3.5 Comau shall be entitled to assign to any third party any and all receivables due by Customer to Comau under the Contract.

Art. 4 DELIVERY

- 4.1 Delivery conditions for Products and related services are detailed in the Offer.
- 4.2 Comau shall inform the Customer about the effective date when the Products will be ready for delivery. If the Customer fails to receive the Products, Comau shall have the right to provide for the storage of the Products in its own or other warehouses, without any previous communication and without prejudice to Comau right to claim compensation for any cost and loss borne by Comau. If the Customer fails to take delivery of the Products

within 30 (thirty) days from the date notified by Comau, Comau shall have the right to terminate the Contract and to recover all the losses and damages.

- 4.3 For the sake of clarity, no charges shall apply to delays caused, in all or in part, by force majeure or by Customer's default or by Customer request(s) of changes on Products, said events implying a mere adjustment of delivery dates.

Art. 5 TECHNICAL DOCUMENTATION

- 5.1 Comau Products will be supplied with standard technical documentation in Italian and/or in English language.
- 5.2 Projects, drawings and, in general, any technical documentation concerning the Products shall remain the sole property of Comau. The Customer shall be entitled to use such documentation only for installation, use and maintenance operation of the Products. Therefore the Customer shall be excluded either from using such documentation for any purpose other than as set forth above or from copying, transmitting or communicating it to any third party, without a prior written authorization by Comau.
- 5.3 Comau will deliver to the Customer a technical manual (hereinafter "Manual") that must be scrupulously respected by the Customer in order to operate the e.DO Experience products and service.

Art. 6 SOFTWARE AND IP RIGHTS

- 6.1 With the complete payment of the Price, Comau shall transfer to the Customer a non-exclusive, non-transferable license of the Comau's software necessary to interact with e.DO robot and of the related documents and applications (hereinafter "Software").
- 6.2 The ownership of Software and all patents and intellectual property rights including copyright shall remain the exclusive property of Comau. Consequently the Customer shall not be entitled either to reproduce the Software and the applications in any way or to use such software and applications for any other purpose or, without prior written agreement with Comau, to permit its use to any third party. In particular, the Customer by way of example shall:
- a) neither reproduce nor copy the same for any use other than as provided for by the law or by Comau in connection with the Products, nor transmit or disclose the same to any not authorized party;
 - b) not disclose any data concerning the Software until they become available to third parties;
 - c) not use the Software to develop its own or third parties' data if not permitted by the law or expressly authorized by Comau;
 - d) neither hire, distribute, use with any third parties or sell, also by interactive systems or remote services for data's elaboration, or in general not use the same in a different way from the specific use related to the Products;
 - e) not use the Software on products different from Comau Products;

- f) neither make or allow third parties to make reverse engineering, disassembly or editing of the Software, for any purpose different from what permitted by law or expressly authorized in writing by Comau.
- g) Neither develop or use software and/or applications connected with the e.Do experience product and services, unless otherwise agreed in writing with Comau,
- h) Obtain Comau certification for software and application to be used in connection with the e.do Experience. Software not certified by Comau shall not be used in relation with E.do Experience product and service.

- 6.3 In addition to the Software, in the event that the e.DO Experience package chosen by the Customer provides for the release of a library of one or more didApps and/or Training Packages, Comau grants a one-year renewable, non-exclusive, non-transferable license to use such library and Training Packages.
- 6.4 Comau declares that, in addition to the Software, specified educational apps to be uploaded in the Products are licensed by third parties developers under an "open source" licensing scheme. The Customer acknowledges that has received information in relation to said apps and declares that said apps will be used in compliance with open source licenses granted by said third parties developers. Failing to do so, Products could not perform in full or partially their functions or reach the performances, without this being a defect or a non-conformity of the Product and with full disclaimer of any warranty or responsibility made by Comau to the fullest extent permitted by applicable laws.
- 6.5 In case of further resale of the Products by the Customer, the Customer shall duly inform the purchasers about Comau rights.
- 6.6 All intellectual property rights and design rights held by Comau shall remain the exclusive property of Comau and all drawings, designs, parts and spare parts related to the Products or any part thereof shall not be reproduced or disclosed or allowed to be reproduced or disclosed by the Customer without Comau's prior written authorization.
- 6.7 Customer and distributors shall not develop, or cause third parties to develop, proprietary solutions similar to the e.Do experience product and service and/or implement practices which can cause unfair competition against e.Do experience product and service.

ART. 7 TRAINING AND CERTIFICATION SERVICES

- 7.1 E.do Experience product and service shall be operated only by personnel duly trained and/or certified by Comau;
- 7.2 Comau shall perform training and certification services according to the Contract.
- 7.3 Whenever the services have to be performed, in full or in part, at Customer's premises, Customer shall provide full

and safe access to Comau's employees and Comau shall comply with all rules and regulations in force therein.

Art. 8 WARRANTIES

- 8.1 Comau warrants good quality and proper operation of the Products, including their parts and the Software, for 24 (twenty-four) months from the delivery date according to art. 4.1.
- 8.2 Comau warranty will consist in the repair or, according to Comau sole discretion, the replacement of the defective Products or parts, at its own costs and expenses during the warranty period.
- 8.3 Warranty stated in this article 8 refers to defects resulting from events occurred before the delivery of the Products (i.e. faulty fabrication, use of defective components, etc.). If the Product is received damaged or altered, the Customer shall refuse delivery or accept it under reserve with prompt notice to Comau.

Warranty shall not apply in case of:

- a) non-compliance with Comau's operational and/or maintenance instructions;
 - b) normal wear and tear;
 - c) repair or modification to the Products not carried out by Comau or carried out without Comau's prior consent;
 - d) use of unauthorized software of third parties or spare or replacement parts;
 - e) use of third party controls operating above the limits of the mechanical arms;
 - f) improper use or use of the Products outside their scope as described in the technical specifications;
 - g) non-compliance with Comau's storage, installation, operation or environmental requirements.
 - h) non-compliance with the Manual instructions.
- 8.4 For repaired or replaced parts the warranty period will be 24 (twenty-four) months from the date of the repair or replacement. Such extension of warranty period shall be limited to the repaired or replaced part and not extended to the whole Products.
 - 8.5 Once the defect / non-operation has been notified, Comau shall intervene directly or by mean of any third parties charged for that purpose and operate for the necessary repairs, replacements or modifications within a reasonable term. Any intervention by the Customer without previous written agreement with Comau, will imply the automatic expiration of the warranty.
 - 8.6 Whenever the defects notified are verified by Comau, Comau shall bear all costs and expenses deriving from the executed repair or replacement. Any other cost and expense, such as shipping costs of defective parts or travel and accommodation costs, shall be borne by the Customer. Any term and condition agreed by Comau and a third party about the third party's softwares and apps used in the Products will be entirely transferred to the Customer

according to the provisions set forth in art. 6. Service on such software is, therefore, limited to the same terms and conditions applied by the third party to Comau.

- 8.7 All other warranties not expressly included in these GTC are excluded to the fullest extent permitted by applicable law. Comau specifically disclaims the implied warranties of merchantability and fitness for a particular purpose.
- 8.8 For the sake of clarity, unless otherwise expressly agreed in writing between the Parties, Comau is not responsible of the use or application of the Products, other than the e.Do experience. Any different use, configuration, programming and development of the related application not authorized or certified by Comau is excluded, and will be at the Customer's exclusive economic and technical charge and at its exclusive liability. Comau liability shall be excluded in case of not authorized use and in case not certified software and applications are used in relation with the E.do Experience. product and service.

Art. 9 LIMITATION OF LIABILITY

- 9.1 Comau shall be liable for direct damages suffered by the Customer insofar they are proved to be attributable exclusively and directly to the non-performance or improper performance of Comau's obligations under the Contract provided that the total liability of Comau under the Contract whether in tort or in contract shall not exceed the price of the Product.
- 9.2 Any sort of liability for indirect, consequential or incidental damages, including but not limited to loss of production, loss of property or profit and cost of product recall, are expressly excluded and specifically disclaimed.

Art. 10 CONFIDENTIALITY

- 10.1 "Confidential Information" shall mean any know-how and other technical, business and other information, which either Party will disclose or have disclosed to the other Party.
- 10.2 The Parties shall maintain in strict confidence all Confidential Information received from the other Party and shall keep secret and not disclose such Confidential Information, directly or indirectly, to any third party and shall itself use the Confidential Information solely for the purposes permitted by the Offer or the Contract.
- 10.3 In maintaining the confidentiality of Confidential Information, the Parties shall exercise the same degree of care that it exercises with its own Confidential Information, and in no event less than a reasonable degree of care. The confidentiality obligations of the Parties shall be effective for 5 (five) years from the date of the Offer or the Contract, whichever comes later.

Art. 11 FORCE MAJEURE

- 11.1 If any Party is prevented from performing any of its obligations under the Contract due to an event of force majeure, such Party's contractual obligations affected by such an event under the Contract shall be suspended

during the period of delay caused by the force majeure and shall be automatically extended, without penalty or liability, for a period equal to such suspension. All other obligations under the Contract and the time for performance thereof shall remain unaffected. Force majeure events mean any and all events which are beyond the control of the Parties, and which are unforeseen, unavoidable or insurmountable, and which prevent total or partial performance by either of the Parties. Such events shall include, for example, wars, riots, epidemic diseases, civil commotion, fire, earthquake, storm, typhoons, flood, failure of public utilities or common carriers, general strikes, lock-outs affecting the affected Party or its suppliers, or any other circumstances whatsoever whether of the kind herein enumerated or otherwise which cannot be foreseen, prevented or controlled.

- 11.2 The prevented Party shall use reasonable endeavors to mitigate and circumvent the force majeure.
- 11.3 The prevented Party shall within 5 (five) working days of the occurrence of such event of force majeure notify the other Party of the occurrence of any event of force majeure by e-mail or courier. Within 10 (ten) days of the occurrence of such event of force majeure, the prevented Party shall provide the other Party with a detailed description of the event of force majeure. The prevented Party shall further provide to the other Party any additional information the other Party may reasonably request to confirm the occurrence and extent of the event of force majeure.
- 11.4 Should the delay caused by any event of force majeure continue for more than 3 (three) months, the other Party may choose to either continue to perform its obligations under the Contract or terminate this Contract.

Art. 12 COMPLIANCE WITH EXPORT CONTROL REGULATIONS

- 12.1 Customer acknowledges that the Products could be subject to national and/or foreign statutory provisions and regulations for export controls, and may not be sold, transferred or used for purposes other than those agreed between the Parties. Customer declares it shall adhere to such provisions and regulations.
- 12.2 The Customer declares that:
- Products may not in any way whatsoever directly or indirectly be used in connection with the design, production, storage or use of chemical, biological or nuclear weapons or transport systems;
 - Products may not in any way whatsoever directly or indirectly be used for military or nuclear applications;
 - shall provide to Comau an "End User Statement" in case Comau has to require an export license.
- 12.3 The Customer shall indemnify and hold harmless Comau from and against any claim, proceeding, action, fine, loss, cost and damages arising out of or relating to any noncompliance with export control regulations by the Customer, and the Customer shall compensate Comau for all losses and expenses resulting thereof.

- 12.4 Comau shall not be obligated to fulfill a Contract if such fulfillment is prevented by any impediments arising out of national or international foreign trade or customs requirements or any embargoes or other sanctions.

Art. 13 APPLICABLE LAW AND JURISDICTION

- 13.1 These GTC and the Contract shall be governed by and construed under the laws of country where Comau has its registered address.
- 13.2 In the event of any dispute, controversy or claim arising out of or relating to the GTC or the Contract, or the breach, termination or invalidity hereof (hereinafter referred to as the "Dispute"), the Parties shall attempt in the first instance to resolve such Dispute through friendly consultations.
- 13.3 If the settlement as per article 13.2 cannot be reached within a period of 30 (thirty) days, the Dispute shall be referred to the court of city where Comau has its registered address.
- 13.4 The "United Nations Convention on Contracts for the International Sale of Goods (CISG)" shall not apply and is expressly excluded.

(date, stamp and signature) _____

The Customer expressly approves in writing the following clauses of the GTC: 1.3, 2.2, 3.3, 3.4, 4.2, 6.2, 6.3, 6.7, 8, 9, 12.3, 12.4, 13.

(date, stamp and signature) _____