BIONIT LABS®

TURNING DISABILITIES INTO NEW POSSIBILITIES

EN

WAVE ELECTRODE

WAVE ELECTRODE

Mod. AE02-NN

DATASHEET

Rev. 04_EN_03 – 18/07/2025

COMMERCIAL NAME	Wave Electrode	
REF	AE02-NN-01, con NN = notch frequency code	
INTENDED USE	Non-invasive surface EMG (electromyographic) electrode designed for controlling myoelectric prostheses and orthosis (without measuring function).	
TECHNICAL FEATURES	COMPATIBILITY	
	Consult the chart on p. 2, containing the list of Wave Electrode compatible devices.	
	PRODUCT DATA	
	Notch filter frequency	• 50 Hz (NN = 50) • 60 Hz (NN = 60)
	Sensitivity range	2.400 ÷ 120.000 x
	Dimensions	• Without lateral supports: (27 x 18 x 8) mm / (1.06 x 0.71 x 0.31) inches • With lateral supports: (45 x 18 x 8) mm / (1.77 x 0.71 x 0.31) inches
	Weight	5 g / 0.18 oz
	Applied part materials	• Medical surgical steel AISI 316L (EN 1.4404) • Medical ABS
	Expected lifetime	5 years
	Warranty	1 year
	MECHANICAL AND ELECTRICAL FEATURES	
	Supply voltage	6 ÷ 8.4 V (DC)
	Max. supply current	2 mA
	Degree of protection against liquid and solid particles penetration (IEC 60529)	IP67
	OPERATING CONDITIONS	
	Use temperature	from 0 °C/ + 32 °F to + 40 °C/ + 140 °F
	Usage humidity	30% ÷ 85 %
	Storage and transport temperature	from -25 °C/ -13 °F to +70 °C/+158 °F
	Relative humidity of storage and transport	≤ 85 %
TESTS	Each medical device is tested before the shipment, in accordance with company procedures. The reference standards are affixed on the declaration of conformity attached to the device.	
TECHNICAL REGULATIONS	IEC 60601-1, IEC 60601-1-2, IEC 60601-1-11, IEC 62304, IEC 62366 IEC 60529:1989/AMD2:2013/COR1:2019 IEC 60601-1-8:2006+AMD1:2012 ISO 10993-10, ISO 22523 RED ETSI 300 328	
LABELLING	Labelling in accordance with UNI EN ISO 15223-1, IEC 60601-1; copy of the label is available in the Installation, Maintenance and Operation Manual.	
DISPOSAL INSTRUCTIONS		This medical device must be managed in accordance with art. 13 - Legislative Decree 25 July 2005, n. 151 “Implementation of directives 2002/95/CE, 2002/96/CE and 2003/108/CE, relating to the reduction of the use of dangerous substances in electrical and electronic equipment, as well as waste disposal”.

***Chart 1**: Devices compatible with the Wave Electrode mod.AE02-NN.*

Manufacturer	Product	Type	Model / Part Number
BionIT Labs S.r.l.	Adam's Hand	Multi-articulating prosthetic hand	AH02-CDYY-E
BionIT Labs S.r.l.	Cavo per Wave Electrode	Connection cable	AEC-YYY
BionIT Labs S.r.l.	ThunderCell Battery	External battery	EB02-E
Cogent Mechatronic Ltd	Internal Battery	Internal battery	IB01
Otto Bock HealthCare GmbH	Energy Pack	External battery	757B20
Otto Bock HealthCare GmbH	Energy Pack	External battery	757B21
Otto Bock HealthCare GmbH	MyoEnergy Integral	Internal battery	757B35=0 / =1 / =3 /=4 /=5
Otto Bock HealthCare GmbH	System Electric Hand Digital Twin	Tridigital myoelectric hand	8E38=7
Otto Bock HealthCare GmbH	System Electric Hand DMC Plus	Tridigital myoelectric hand	8E38=6
Otto Bock HealthCare GmbH	MyoHand VariPlus Speed	Tridigital myoelectric hand	8E38=9
Otto Bock HealthCare GmbH	SensorHand Speed	Tridigital myoelectric hand	8E38=8
Otto Bock HealthCare GmbH	Bebionic	Tridigital myoelectric hand	8E70=*
Össur®	1300/2000 mAh Battery	Internal battery	PL000335/6
Össur®	Rechargeable Li-Polymer Battery	Internal battery	000172B
Össur®	Replaceable Battery	External battery	SA069313
Össur®	i-Limb® Access	Multi-articulating prosthetic hand	TBX5004X / TBX5048X
Össur®	i-Limb® Ultra	Multi-articulating prosthetic hand	TBX5018X / TBX5048X
Össur®	i-Limb® Quantum	Multi-articulating prosthetic hand	TBX5014X
Össur®	i-Limb® Revolution	Multi-articulating prosthetic hand	-
TASKA™ Prosthetics	TASKA Hand	Multi-articulating prosthetic hand	-
COVVI	Nexus Hand	Multi-articulating prosthetic hand	CVXXXQXXXXXXX(+0000XX)
Aether Biomedical	Zeus	Multi-articulating prosthetic hand	A1 - L /-R
Vincent Systems GmbH	VINCENTevolution3	Multi-articulating prosthetic hand	-
Vincent Systems GmbH	VINCENTevolution3+	Multi-articulating prosthetic hand	-
Vincent Systems GmbH	VINCENTevolution4	Multi-articulating prosthetic hand	-
Vincent Systems GmbH	VINCENTyoung3+	Multi-articulating prosthetic hand	-
Steeper Group	Lithium Polymer Battery	External battery	BLPA72
Steeper Group	S-Charge System	Internal battery	SC2200
Steeper Group	Espire Elbow Pro*	Myoelectric elbow prosthesis	EEP-XXX
TASKA	TASKA® Battery system	Internal battery	TASKA-BIG1-1
COVVI Ltd.	Power Supply systems	Internal battery	COVSB-1600
COVVI Ltd.	Power Supply systems	Internal battery	COVSB-2600
Vincent Systems GmbH	VINCENTbattery_flex®	Internal battery	-
IBT	FlexCell®	Internal battery	2017200
IBT	FlexCell Mini®	Internal battery	2037200
Fillauer	MC Standard Wrist Rotator	Active Wrist Rotator	5010045, 5010054, 5010055
Fillauer	MC Standard Wrist Rotator + Six bands coaxial plug	Active Wrist Rotator	5010045, 5010054, 5010055, 3010869
Fillauer	Utah Arm 3+	Elbow Prosthesis	5010039
Otto Bock HealthCare GmbH	Electric Wrist Rotator	Active Wrist Rotator	10S17
Otto Bock HealthCare GmbH	MyoRotronic	Control System for Active Wrist Rotator	13E205
Otto Bock HealthCare GmbH	DynamicArm	Elbow prosthesis	12K100N
HKK Bionics GmbH**	BKS exomotion® hand one Gen2 right	Upper Limb Orthesis	498
HKK Bionics GmbH**	BKS exomotion® hand one Gen2 left	Upper Limb Orthesis	499

** In order for the Wave Electrode PN: AE02 electrodes to be compatible with the Espire Elbow Pro PN: EEP-XXX and Utah Arm 3+ PN:5010039, for both the devices an electrode cable with the dedicated connector must be used.*

***If the Wave Electrode is used with HKK Bionics devices "BKS exomotion hand one Gen2", the received power supply voltage will be equal to 5V.*

Manufacturer's contacts

For any information, request or complaint, please contact:

BionIT Labs S.r.l.
Via Cracovia, 1
73010 – Soleto (LE) – ITALY
+39 0836 1946903
support@bionitlabs.com

Certified Company

BIONIT LABS®

TURNING DISABILITIES INTO NEW POSSIBILITIES

BionIT Labs S.r.l.

+39 0836 1946903

Via Cracovia, 1
73010 Soleto (LE) - Italia

support@bionitlabs.com

BionIT Labs Inc.

+1 (877) 4246648

18 Bridge St Ste 2A - 11201,
Brooklyn, NY - United States

na_support@bionitlabs.com

www.bionitlabs.com