# Highly reliable 3-Axis Soldering Robots Model ET9383E-BB1 & ET9483E-BB1



# increases production with less hands • ensures soldering quality for each joint



# **Scope of Supply:**

- 3-Axis Soldering Robot
- · Hand-held Teaching Pendant
- Soldering & Wire Feeding Controller
- · Soldering & Wire Feeding Head
- 911G Series Soldering Tip
- Soldering Tip Cleaning System

#### **Features**

#### **Motion Platform**

E-Series Soldering Platform is of high speed & high accuracy with low noise, closed-loop control of Y-axis , no lost steps, strong load capacity, easy maintenance, rich I/O interfaces, support MES to read local data and expand operation use, two-hand start (optional), ESD safe

#### **Heating Controller**

QUICK378FA Heating Controller uses high frequency eddy current heating for stable and reliable temperature, fast thermal recovery, RS-485 interface for real-time monitoring and to set parameters like temperature, solder feeding etc, alarm for abnormal temperature and solder shortage etc.

### **Soldering Pencil**

QUICK9018M Soldering Pencil has front temperature sensor for quick sensing of solder joint temperature fluctuation and rapid thermal recovery.

#### Solder Feeder

QUICK371TAA, small size and high precision. controlled by precision stepper motor, the minimum solder feeding length can reach 0.1mm, solder shortage and block alarm function available.

#### **Teaching Pendant**

QUICK9011D Teaching Pendant, supports array and group functions, with the function of side points, and supports various processes such as single-step operation, integral machining, simulated operation and automatic circular

Specifications		Model: ET9383E-BB1 Model: ET9483E-		
Input Supply		100-240V AC, 50 Hz	100-240V AC, 50 Hz	
Heating Controller Power		200W	200W	
Power Consumption		500W	500W	
Temperature Range		50 ∼ 500°C	50 ∼ 500°C	
Number of Axis		3	3	
Movement Range	X & Y	300mm	400mm	
	Z	100mm	100mm	
Moving Speed	X & Y	0.1 ~ 800mm/sec	0.1 ~ 800mm/sec	
	Z	0.1 ~ 300mm/sec	0.1 ~ 300mm/sec	
Repeat Accuracy	X, Y & Z	±0.01mm	±0.01mm	
Operating Range		240 x 300mm	340 x 400mm	
Maximum Payload	Z-Axis	5 kg	5 kg	
	Platform	8 kg	8 kg	
Dimensions (WxDxH)		630 x 607 x 730 mm	733 x 710 x 742 mm	
Weight		40 kg	45 kg	

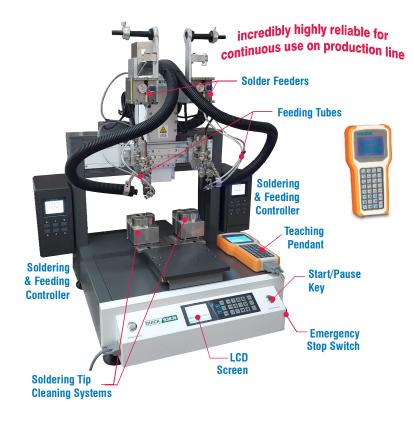
on-site services can be provided at extra charges if pre-paid by customer in advance

Warranty is 12 months from the date of invoice. It excludes all consumable parts as Heating Elements, Temperature Sensors, Soldering Tips, Cleaning Sponges etc., and any sort of mechanically damaged parts. While the information contained begin in the Sens capability sense of any two-

# Dual Head 3-Axis Soldering Robots Model ET9383ED-BB1 & ET9483ED-BB1



#### increases production with less hands • ensures soldering quality for each joint



# **Scope of Supply:**

- 3-Axis Dual Head Soldering Robot
- · Hand-held Teaching Pendant
- Soldering & Wire Feeding Controller
- · Soldering & Wire Feeding Head
- 911G Series Soldering Tip
- Soldering Tip Cleaning System

#### **Features**

#### **Motion Platform**

E-Series Soldering Platform is of high speed & high accuracy with low noise, closed-loop control of Y-axis, no lost steps, strong load capacity, easy maintenance, rich I/O interfaces, support MES to read local data and expand operation use, two-hand start (optional), ESD safe

#### **Heating Controller**

QUICK378FA Heating Controller uses high frequency eddy current heating for stable and reliable temperature, fast thermal recovery, RS-485 interface for real-time monitoring and to set parameters like temperature, solder feeding etc, alarm for abnormal temperature and solder shortage etc.

### **Soldering Pencil**

QUICK9018M Soldering Pencil has front temperature sensor for quick sensing of solder joint temperature fluctuation and rapid thermal recovery.

#### Solder Feeder

QUICK371TAA, small size and high precision. controlled by precision stepper motor, the minimum solder feeding length can reach 0.1mm, solder shortage and block alarm function available.

#### **Teaching Pendant**

QUICK9011D Teaching Pendant, supports array and group functions, with the function of side points, and supports various processes such as single-step operation, integral machining, simulated operation and automatic circular

Specifications		Model: ET9383ED-BB1 Model: ET9483ED		
Input Supply		100-240V AC, 50 Hz	100-240V AC, 50 Hz	
Heating Controller Power		200W	200W	
Power Consumption		700W	700W	
Temperature Range		50 ∼ 500°C	50 ∼ 500°C	
Number of Axis		3	3	
Movement Range	X & Y	300mm	400mm	
	Z	100mm	100mm	
Moving Speed	X & Y	0.1 ~ 800mm/sec	0.1 ~ 800mm/sec	
	Z	0.1 ~ 300mm/sec	0.1 ~ 300mm/sec	
Repeat Accuracy	X, Y & Z	±0.01mm	±0.01mm	
Operating Range		300 x 240mm	400 x 340mm	
Maximum Payload	Z-Axis	5 kg	5 kg	
	Platform	8 kg	8 kg	
Dimensions (WxDxH)		690 x 615 x 765 mm	790 x 715 x 765 mm	
Weight		40 kg 45 kg		

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# Highly reliable 4-Axis Soldering Robots Model ET9384E-BB1 & ET9484E-BB1

Soldering & Wire Feeding Head

Soldering Tip Cleaning System

911G Series Soldering Tip



# increases production with less hands • ensures soldering quality for each joint



# Scope of Supply:

- 4-Axis Soldering Robot
- · Hand-held Teaching Pendant
- Soldering & Wire Feeding Controller

# Features Mation Blotte

#### **Motion Platform**

E-Series Soldering Platform is of high speed & high accuracy with low noise, closed-loop control of Y-axis, no lost steps, strong load capacity, easy maintenance, rich I/O interfaces, support MES to read local data and expand operation use, two-hand start (optional), ESD safe

#### **Heating Controller**

QUICK378FA Heating Controller uses high frequency eddy current heating for stable and reliable temperature, fast thermal recovery, RS-485 interface for real-time monitoring and to set parameters like temperature, solder feeding etc, alarm for abnormal temperature and solder shortage etc.

### **Soldering Pencil**

QUICK9018M Soldering Pencil has front temperature sensor for quick sensing of solder joint temperature fluctuation and rapid thermal recovery.

#### Solder Feeder

QUICK371TAA, small size and high precision. controlled by precision stepper motor, the minimum solder feeding length can reach 0.1mm, solder shortage and block alarm function available.

#### **Teaching Pendant**

QUICK9011D Teaching Pendant, supports array and group functions, with the function of side points, and supports various processes such as single-step operation, integral machining, simulated operation and automatic circular

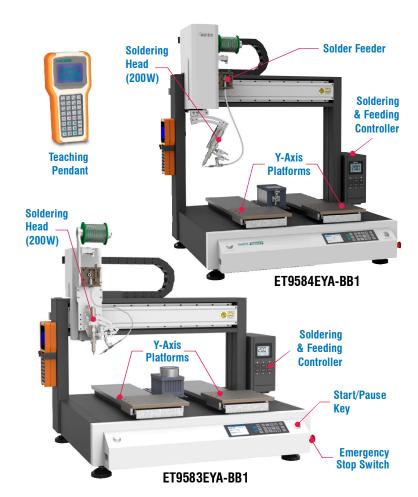
Specifications		Model: ET9384E-BB1 Model: ET9484		
Input Supply		100-240V AC, 50 Hz	100-240V AC, 50 Hz	
Heating Controller Power		200W	200W	
Power Consumption		600W	600W	
Temperature Range		50 ∼ 500°C	50 ∼ 500°C	
Number of Axis		4	4	
Movement Range	X & Y	300mm	400mm	
	Z	100mm	100mm	
	R	±180°	±180°	
Moving Speed	X & Y	0.1 ~ 800mm/sec	0.1 ~ 800mm/sec	
	Z	$0.1\sim300$ mm/sec	0.1 ~ 300mm/sec	
	R	±0.1 ~ 800°/sec	$\pm 0.1 \sim 800^{\circ}/\text{sec}$	
Repeat Accuracy	X, Y & Z	±0.01mm	±0.01mm	
	R	±0.02°	±0.02°	
Operating Range		240 x 300mm	340 x 400mm	
Maximum Payload	Z-Axis	3 kg	3 kg	
	Platform	8 kg	8 kg	
Dimensions (WxDxH)		633 x 618 x 852 mm	732 x 723 x 852 mm	
Weight		45 kg	55 kg	

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# reliable & caring since 1976

#### increases production with less hands • ensures soldering quality for each joint



#### **Features**

#### **Motion Platform**

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#### **Heating Controller**

QUICK378FA Heating Controller uses high frequency eddy current heating for stable and reliable temperature, fast thermal recovery, RS-485 interface for real-time monitoring and to set parameters like temperature, solder feeding etc, alarm for abnormal temperature and solder shortage etc.

# **Soldering Pencil**

QUICK9018M Soldering Pencil has front temperature sensor for quick sensing of solder joint temperature fluctuation and rapid thermal recovery.

#### Solder Feeder

QUICK371TAA, small size and high precision. controlled by precision stepper motor, the minimum solder feeding length can reach 0.1mm, solder shortage and block alarm function available.

# **Teaching Pendant**

QUICK9011D Teaching Pendant, supports array and group functions, with the function of side points, and supports various processes such as single-step operation, integral machining, simulated operation and automatic circular

Specifications		Model: ET9583EYA-BB1	Model: ET9584EYA-BB1	
Input Supply		100-240V AC, 50 Hz	100-240V AC, 50 Hz	
Heating Controller Power		200W	200W	
Power Consumption		500W	600W	
Temperature Range		50 ∼ 500°C	50 ∼ 500°C	
Number of Axis		3	4	
	X & Y	500mm & 400mm	500mm & 400mm	
Movement Range	Z	100mm	100mm	
	R	-	±180°	
Moving Speed	X & Y	0.1 ~ 800mm/sec	0.1 ~ 800mm/sec	
	Z	0.1 ~ 300mm/sec 0.1 ~ 300m		
	R	-	$\pm 0.1 \sim 800^{\circ}/\text{sec}$	
Repeat Accuracy	X, Y & Z	±0.01mm	±0.01mm	
	R	-	±0.02°	
Operating Range		200 x 400mm	200 x 400mm	
Maximum Payload	Z-Axis	5 kg	3 kg	
	Platform	8 kg	8 kg	
Dimensions (WxDxH)		830 x 707 x 731 mm	833 x 723 x 852 mm	
Weight		55 kg	65 kg	

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# Platform Layouts and Optional Accessories for Soldering Robots



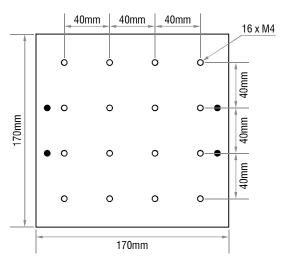
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# Few user references (many with repeat orders) in India for Robotic solutions by Quick

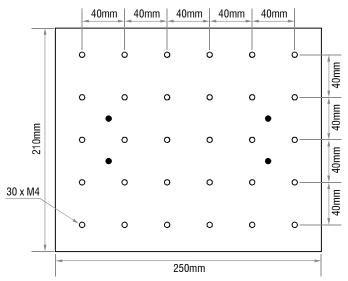
- Minda Stoneridge, Pune (more than 10 in repeat....repeat orders in the last 3 years)
- Amphenol, Chennai (repeat orders)
- · Mag Power, Pune
- Mindarika, Gurgaon
- · Nidec, Neemrana (Japanese MNC) more than 10

- Interface, Gurgaon
- Nokia, Chennai (repeat orders)
- · Precision Electronics Hyderabad
- Flash, Pune
- BG LI-IN. Aurangabad
- Tymtix, Bangalore

# Plateform Layout of Soldering Robots to prepare PCB Fixture as per your applications



Applicable Models: ET9383E-BB1, ET9383ED-BB1, ET9384E-BB1, ET9583EYA-BB1, ET9584EYA-BB1



Applicable Models: ET9483E-BB1, ET9483ED-BB1, ET9484E-BB1

# Optionally available Accessories for these Soldering Robots

# **Tip Position Calibration Device Model QUICK9036**

High positioning precision of 0.02mm

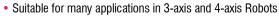
· Long life as it uses photo-electric non-contact type of test

 One key operation, just press "Calibrate" to complete while calibrating the tips position

No need of the power supply,

just need compressed air

 Automatically calibrate the coordinates after replacing the tip, eliminate to coordinates differences occur due to tip replacement



# **Powerful Fumes Extraction System Model FumePR0101-50LC**

Extensively used in Soldering Robots. Solder Pot, R&D lab etc.

No Plumbing required Just position on the Table as needed

**Burn-proof type Fume Absorbers** 

# **Scope of Supply**

- 1xFumePRO101 Main Extraction Unit
- 1xExtraction Arm (50mm dia, 1.2m long)
- 1xRound Fume Absorbing Hood
- 1xSpeed Control Regulator
- 5xSpare Pre-Filters

The Feeder in this version is adapted to be mounted

Available for 0.5mm to 1.2mm dia solder wires



#### **Nitrogen Generator Model QUICK9036** Solder Wire Feeder Model QUICK371TIAA

in the upper part of the robot's head (on the housing). The wire feeding mechanism is based on a stepper motor and a cutting gear system. The cut of the solder wire translates into better flux flow, less spatter and its more effective operation.



· Used with QUICK9018BMT Soldering Pencil to improve the soldering efficiency

Provide Nitrogen with the purity of 99.9%

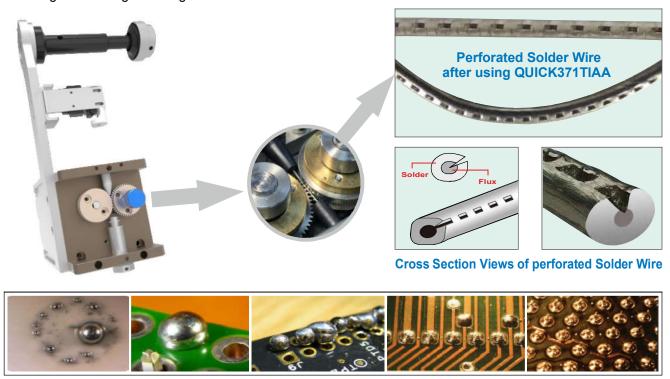
on-site services can be provided at extra charges Warranty is 12 months from the date of invoice. It excludes all consumable parts as Heating Elements, Temperature Sensors, Soldering Tips, Cleaning Sponges etc., and any sort of mechanically damaged parts. if pre-paid by customer in advance While the information contained herein in, has been carefully compiled to the best of our knowledge, nothing is intended as representation and warranty on our part; and no statement shall be construed as recommendation to infringe any of existing patents. We accept no liability of whatsoever for any faults and errors in the information contained herein. Contents of this catalogue and specifications of the products, are subject to change without notice due to continuous improvements



#### avoids solder balls formation during soldering

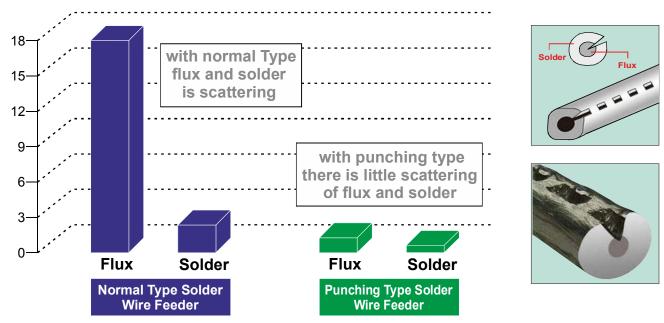
# Selection of Solder Wire Feeder is also critical and important to avoid Solder Balls formation and splashing of solder and flux during Soldering

Latest Technology Punching/Perforated Type We recommend latest technology Punching type Soldering Wire Feeder for Robotic Soldering which punches holes in soldering wires at regular interval and allows better Flux flow and out-gassing during the soldering process which avoids SOLDER FLUX SPLASHES and avoids formation of Soldering Balls during soldering



Various examples of solder ball formation during soldering with normal type Feeding Unit

# Graphical representation of micro Solder Balls and Flux Scattering



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# **Recommendations and Guidance for Soldering Tips Selection**

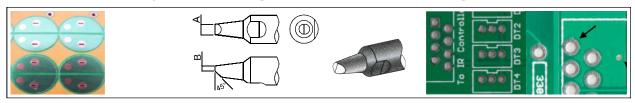


#### Customized Soldering Robot Tips are possible to meet specific requirements

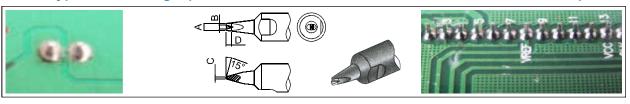
# Why selection of correct Soldering Tip is critical and important to ensure quality of each Soldering Joint and also to achieve practically zero rejection for Solder Joints

Soldering Tip selection plays an important role to optimize soldering quality. That is why it is necessary to select the most suitable Soldering Tip. Below are few illustrations for selection of Soldering Tips for different applications.

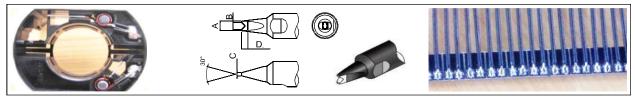
# PC type of Soldering Tip is recommended for large pads



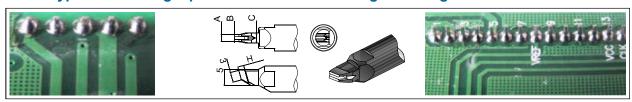
# DV1 type of Soldering Tip is recommended for thru hole leads & connector/LCD pins



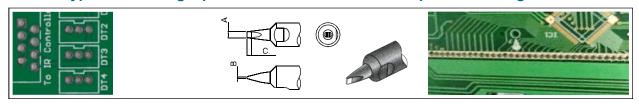
# DV2 type of Soldering Tip is recommended for wire harnessing



# N type of Soldering Tip is recommended for drag soldering of row of connectors



# D type of Soldering Tip is recommended for line and point soldering on PCBs



We will be able to help you to select correct Soldering Tip, for that we need following from you:

a) Photo/s of your Jobs on which you want to solder

Warranty is 12 months from the date of invoice. It excludes all consumable parts as

b) Photo/s of your components which you want to solder

Please either email these at romesh1947@gmail.com or Whatsapp on Cell: 9316134502

on-site services can be provided at extra charges if pre-paid by customer in advance

# Wide range of Very Long-Life Soldering Tips for Soldering Robots



# Customized Soldering Robot Tips are possible to meet specific requirements

# 911B, 911G, 912 and 913-Series Soldering Tips for various Soldering Robots

Types	Part Number	Size (A)	Size (B)	Size (C)	Size (D)
Sloped Type	*** -10PC	1.0mm	0.5mm		
Let 10 (a)	*** -13PC	1.3mm	0.65mm		
	*** -16PC	1.6mm	0.8mm		
	*** -20PC	2.0mm	1.0mm		
m.	*** -24PC	2.4mm	1.2mm		
	*** -30PC	3.0mm	1.5mm		
45°	*** -40PC	4.0mm	2.0mm		
Object Tons	*** -16D	1.6mm	0.6mm	1.5mm	
Chisel Type	*** -20D	2.0mm	0.8mm	1.5mm	
	*** -24D	2.4mm	0.8mm	1.5mm	
	*** -30D	3.0mm	1.0mm	2.0mm	
_	*** -40D	4.0mm	1.2mm	2.5mm	
WW 4.1 =	*** -16DV1	1.6mm	1.0mm	0.6mm	1.5mm
V-Notch Type	*** -20DV1	2.0mm	1.2mm	0.8mm	1.5mm
	*** -24DV1	2.4mm	1.4mm	0.8mm	1.5mm
	*** -30DV1	3.0mm	1.6mm	1.0mm	2.0mm
	*** -40DV1	4.0mm	2.0mm	1.2mm	2.5mm
V-Notch Type	*** -16DV2	1.6mm	1.0mm	0.6mm	1.8mm
	*** -20DV2	2.0mm	1.4mm	0.8mm	1.5mm
	*** -24DV2	2.4mm	1.6mm	0.8mm	2.0mm
	*** -30DV2	3.0mm	2.2mm	1.0mm	2.3mm
	*** -40DV2	4.0mm	3.0mm	1.2mm	2.8mm
N Type	*** -22N08H18	2.2mm	0.8mm	3.2mm	1.8mm
	*** -28N08H15	2.8mm	0.8mm	3.6mm	1.5mm
H.	*** -30N10H20	3.0mm	1.0mm	4.0mm	2.0mm
	*** -32N12H23	3.2mm	1.2mm	4.0mm	2.3mm
	*** -32N12H28	3.2mm	1.2mm	4.0mm	2.8mm

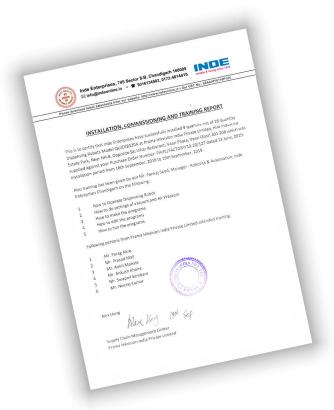
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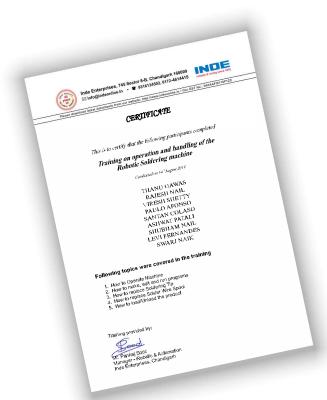
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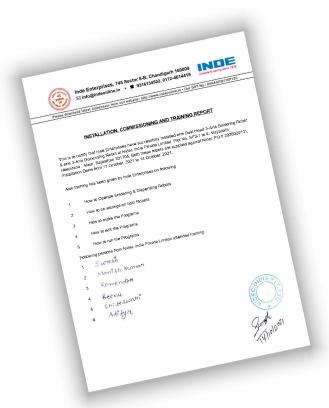
# Few Installation, Commissioning and Training Reports of Soldering Robots











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### fpre-paid by custom

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