



# NAO<sup>H25</sup>

## DATASHEET

Nao H25 is a trusted platform for education and research in various topics, from robotics and computer science to autism and human-robot interaction. Nao H25 is Aldebaran Robotics' top end robot. With this fully-featured humanoid robot, there are no longer any limits to your work. Providing an open platform with full integration of state of the art hardware and software, Nao H25 streamlines efficiency and lets you focus on your core research.



## GENERAL FEATURES

BODY CHARACTERISTICS	
HEIGHT	~58 CM - 22.8"
WEIGHT	~4.8 KG - 10.6LB
BODY MATERIAL	ABS-PC
ENERGY	
CHARGER	AC 90-230 volts / DC 24 volts
BATTERY CAPACITY	~90 min. autonomy
DEGREES OF FREEDOM	
HEAD	2 DOF
ARM	5 DOF in each arm
PELVIS	1 DOF
LEG	5 DOF in each leg
HAND	1 DOF in each hand
MULTIMEDIA	
SPEAKERS	2 Loudspeakers
MICROPHONES	4 Microphones
VISION	2 CMOS Digital Cameras
NETWORK ACCESS	
CONNECTIONS TYPE	WI-FI (IEE 802.11 b/g)
	Ethernet Connection
MOTHERBOARD	
X86 AMD GEODE 500MHz CPU	256MB SDRAM / 2GB Flash Memory

ACTUATORS	
ALDEBARAN ROBOTICS™ ORIGINAL DESIGN BASED ON:	Hall effect sensors
	dsPICS microcontrollers
SENSORS	
DIFFERENT TYPE	36 x Hall effect sensors
	2 x gyrometer 1 axis
	1 x accelerometer 3 axis
	2x bumpers
	2 x channel sonar
	2 x I/R
	Tactile sensor
	8 x FSRs
LED	
TACTILE SENSOR	12 LEDs 16 Blue levels
EYES	2 x 8 LEDs RGB Fullcolour
EARS	2 x 10 LEDs 16 Blue levels
TORSO	1 LED RGB Fullcolour
FEET	2 x 1 LED RGB Fullcolour
SOFTWARE COMPATIBILITIES	
OS	Embedded Linux (32bit x 86 ELF) using custom OpenEmbedded based distribution
PROGRAMMING LANGUAGES	C++, Urbi script, Python, .Net

[www.aldebaran-robotics.com](http://www.aldebaran-robotics.com)