

Neuromorphic and Deep Learning Models for Human Activity Recognition - Table 1

Architecture	Network Type	Test Accuracy (%)	Number of Parameters	Memory Footprint (MB)	Operations Type	Energy Consumption (μJ)	Hardware Platform	Source
LSTM	Non-spiking	\$96.42 \pm 0.03\$	2,125,222	8.50	FLOPs	3,199.99	Intel Movidius Neural Compute Stick 2	1
sLMU	Spiking	\$94.51 \pm 0.15\$	91,200	0.36	SOPs	50.66	Intel Loihi	1
sLMU (ff)	Spiking	\$94.39 \pm 0.13\$	132,540	0.53	SOPs	64.87	Intel Loihi	1
CNN	Non-spiking	\$93.81 \pm 0.10\$	144,899	0.58	FLOPs	2,130.15	Intel Movidius Neural Compute Stick 2	1
sCNN	Spiking	\$92.47 \pm 0.08\$	167,973	0.67	SOPs	5.49	Intel Loihi	1
LMU	Non-spiking	\$91.71 \pm 0.13\$	76,130	0.30	FLOPs	119.47	Intel Movidius Neural Compute Stick 2	1
LMU (ff)	Non-spiking	\$88.16 \pm 0.13\$	89,014	0.36	FLOPs	148.34	Intel Movidius Neural Compute Stick 2	1