









# Honeywell OEM Scan Engines at a Glance

## Mobile Applications

Scan Engine	Honeywell N3680 	N3601 Series 	N6703SR 	EX25 
<b>Overview</b>				
Category	<b>Good enough performance</b>	<b>Better performance</b>	<b>Best performance</b>	<b>Specialized</b>
Description	2D Imager, decoded, fixed focus	2D Imager, undecoded, fixed focus	2D imager, undecoded, fixed focus	2D imager, decoded, auto-focus
Top 3 key features	<ul style="list-style-type: none"> <li>all in one solution- includes decoder board</li> <li>most compact decoded out Honeywell 2D Imager</li> <li>embeds Honeywell Gen 6 decoder platform</li> </ul>	<ul style="list-style-type: none"> <li>slim height: 8,1 mm [0.32 in]</li> <li>80% increased read range vs. N3680</li> <li>increased decodability performance - down to 3 mil C39</li> </ul>	<ul style="list-style-type: none"> <li>slimmer height: 6,8 mm [0.27in]</li> <li>higher motion tolerance, up to 6 m/s [236 in/s]</li> <li>40% increased read range vs. N660X generation</li> </ul>	<ul style="list-style-type: none"> <li>extra long read range, up to 15 m [50 ft]</li> <li>reads barcodes down to 3 mil resolution</li> <li>fast "aim and scan" operation</li> </ul>
Targeted applications	retail, mobile POS, end user mobile applications, payment	retail, mobile POS, field service, end user mobility, payment	T&L, industrial, healthcare, field service, CEP	warehouse
<b>Scan Performance</b>				
Sensor technology	rolling shutter	rolling shutter	global shutter	rolling shutter
Resolution	640 x 480	1296 x 976	1280 x 800	1280 x 800 pixels
FPS	30	30	60	30
Illumination	white LED illumination	white LED illumination	white LED illumination	red LED illumination
Aiming	red rectangular aimer 	green dot LED aimer 	red laser aimer and framer 	laser pointer (dot) 
Motion tolerance	Up to 0,10 m/s	Up to 0,13 m/s	Up to 6,0 m/s	N/A
Field of view	H 37.8° x V 28.8°	H 49° x V 32°	H 48° x V 31°	H 14° x V 8.7°
Symbol contrast	35%	20%	20%	40%
Resolution 1D	5 mil	3 mil	3 mil	3 mil
13 mil UPC	50 mm to 280 mm [2.1 in to 11.0 in]	41 mm to 541 mm [1.6 in to 21.3 in]	34 mm to 573 mm [1.34 in to 22.5 in]	150 mm to 1600 mm [5.9 in to 63 in]
20 mil C39	60 mm to 380 mm [2.4 in to 15.0 in]	49 mm to 740 mm [1.9 in to 29.1 in]	35 mm to 800 mm [1.38 in to 31.5 in]	160 mm to 2800 mm [6.3 in to 110.2 in]
<b>Mechanical/Electrical</b>				
Dimensions (HxWxD)	21,17 mm x 14,6 mm x 11,52 mm [0.83 in x 0.57 in x 0.45 in]	8,1 mm x 21,6 mm x 10,8 mm [0.32 in x 0.85 in x 0.43 in]	6,8 mm x 23, 5 mm x 16,2 mm [0.27 in x 0.93 in x 0.64 in]	34 mm x 33,7 mm x 21 mm [1.34 in x .1.33 in x .83 in]
Weight	3.6 g	3 g	3 g	32g
Interface	USB or TTL	parallel or MIPI	parallel or MIPI	TTL
Input v oltage	TTL Serial: 3.3 VDC ±5%; USB: 5.0 VDC ±5%	3.3 VDC ±5%	3.0 – 3.6V	3.3 V ±5%
Typical current	310 mA (TTL); 220 mA (USB) (idle), 3.5 mA (standby)	170 mA	205mA	450 mA
<b>Environmental/Other</b>				
Operation temp.	-10°C to 40°C [14°F to 104°F]	-20°C to 50°C [-13°F to 122°F]	-30°C to 60°C [-22°F to 140°F]	-20°C to 60° C [-4°F to 140°F]
Storage temp.	-40°C to 60°C [-40°F to 140°F]	-40°C to 85°C [-40°F to 185°F]	-40°C to 85°C [-40°F to 185°F]	-40°C to 70°C [-40°F to 158°F]
Humidity (non-condensing)	up to 95% relative humidity, non-condensing, at 40°C [104°F]	up to 95% RH, non-condensing at 60°C [140°F]	0 to 95%, non-condensing at 60°C (140°F)	5% to 95% (non-condensing)
Ambient light	0 lux to 100,000 lux	0 lux to 100,000 lux	0 lux to 100,000 lux	0 lux to 100,000 lux
Shock rating	2500 G for 0.4 ms at 23°C [73°F]	3500 G for 0.4 ms at 23°C [73°F]	3500 G for 0.4 ms at 23°C [73°F]	2000 G, 0.7ms, half sinus, 3 axes
Vibration	4 axes, 1 hour per axis: 2,54 cm [1 in] peak-to-peak displacement (5 Hz to 13 Hz), 10 G acceleration (13 Hz to 500 Hz), 1 G acceleration (500 Hz to 2,000 Hz)	3 axes, 1 hour per axis: 2,54 cm (1 in) peak-to-peak displacement (5 Hz to 13 Hz), 10 G acceleration (13 Hz to 500 Hz), 1 G acceleration (500 Hz to 2,000 Hz)	3 axes, 1 hour per axis: 2,54 cm [1 in] peak-to-peak displacement (5 Hz to 13Hz), 10 G acceleration (13 Hz to 500Hz), 1 G acceleration (500 Hz to 2,000 Hz)	8 G r.m.s., from 10 Hz to 500 Hz, 2 hours/axis, 3 axes
MTBF*	1,4 7 Mhr	6.9 Mhr	375k hr (laser aimer)	N/A
Warranty	15 months	15 months	15 months	15 months