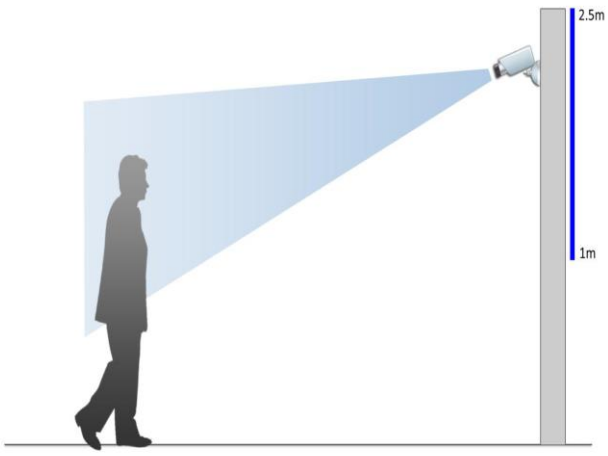
Technical Specification



- Normal lighting conditions, not extreme ones.
- Uniform illumination desirable (300 lux+ is a 'good level')
- Users walking at normal speed. (See Fig.1)Faces near frontal position (+/-35 degrees left/right deviation, +-20 degrees up/down deviation)
- Camera preferably placed at 1.6-1.8m
- Max 2.5 meters height. (See Fig.1) – can be higher but no more than 10 degree tilt angle (to ensure face is captured and not top of head) – camera located further away from target and telephoto lens used.
- Sunglasses can reduce the recognition rate if oversized

Network Video Camera / Lens Minimum Requirements

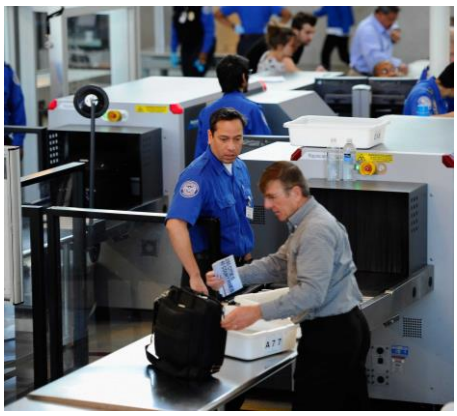
- Good quality images, at least 1080p. (3Mp or greater preferable)
- Permanent network connection: minimum 256 KB down / 128 KB up.
- Optimal face size for recognition and match 833px x 833px per metre.
- Expected face size for recognition and match 400px x 400px per metre.
- Minimum face size for enrolment: 150px x 150px*.
- Preferred Manufacturers: Avigilon, Axis, Bosch, Canon, Panasonic, Sony, Uniview
- Glass optic Megapixel Lens with edge correction
- Preferred Manufacturers: Canon, Fujinon, Pentax

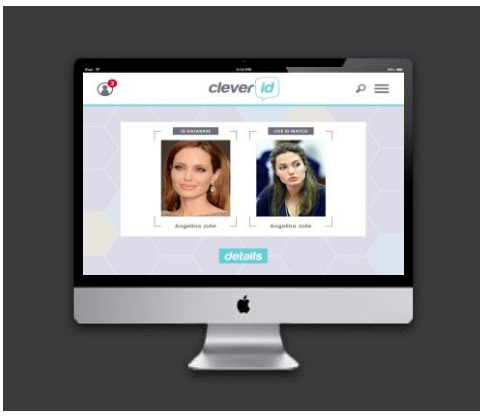
Software Performance

- *Type of identification Face* - contactless, at a distance, on the move
- *Performance* - Up to 150 fps in 1080p high resolution videos
- *Database performance* - One out of 500,000 user search in less than 1 second with a conventional PC
- *Video capture resolution* - High definition
- *Resolution at enrolment* - Faces larger than 100 x 100 pixels, recommended 150 x 150 pixels

PC Storage

- Each alarm activation will store an image size of approximately 84 KB.
- Therefore 100,000 alarm events will require 8.4 GB storage.
- 5000 database subjects may require approximately 20Gb of storage on average





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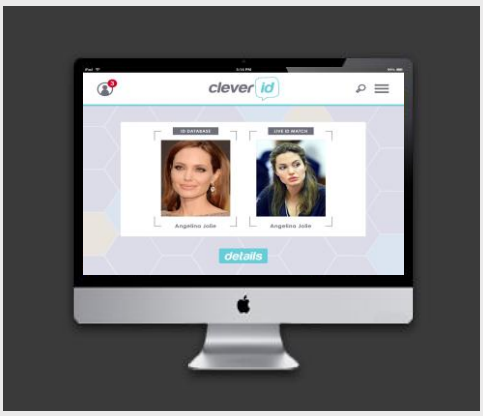
Technical Specification

PC Specification

	1 Camera	2 Cameras	4 Cameras	6 Cameras
clever id Standard	Intel Core i7 CPU: 4xCores 4xThreads 2.5Ghz Ram: 4GB	Intel Core i7 CPU: 4xCores 8xThreads 3.2Ghz Ram: 8GB	Intel Core i7 CPU: 6xCores 12xThreads 3.2Ghz Ram: 16GB	Intel Core i7 CPU: 8xCores 16xThreads 3.2Ghz Ram: 16GB
clever id Crowd Scene	Intel Core i7 CPU: 4xCores 4xThreads 2.5Ghz Ram: 4GB GPU NVidia GTX750Ti / K2200	Intel Core i7 CPU: 4xCores 8xThreads 3.2Ghz Ram: 8GB GPU NVidia GTX750Ti / K2200	Intel Core i7 CPU: 6xCores 12xThreads 3.2Ghz Ram: 16GB GPU NVidia GTX750Ti / K2200	Intel Core i7 CPU: 8xCores 16xThreads 3.2Ghz Ram: 16GB GPU NVidia GTX750Ti / K2200
clever intel	Intel Core i7 CPU: 4xCores 4xThreads 2.5Ghz Ram: 4GB	Intel Core i7 CPU: 4xCores 8xThreads 3.2Ghz Ram: 8GB	Intel Core i7 CPU: 6xCores 12xThreads 3.2Ghz Ram: 16GB	Intel Core i7 CPU: 8xCores 16xThreads 3.2Ghz Ram: 16GB
clever intel Participation	Please contact Customer Clever Limited			
clever access Active	Intel Core i7 CPU: 4xCores 4xThreads 2.5Ghz Ram: 4GB	Intel Core i7 CPU: 4xCores 8xThreads 3.2Ghz Ram: 8GB	Intel Core i7 CPU: 6xCores 12xThreads 3.2Ghz Ram: 16GB	Intel Core i7 CPU: 8xCores 16xThreads 3.2Ghz Ram: 16GB
clever access Passive	Intel Core i7 CPU: 4xCores 4xThreads 2.5Ghz Ram: 4GB GPU NVidia GTX750Ti / K2200	Intel Core i7 CPU: 4xCores 8xThreads 3.2Ghz Ram: 8GB GPU NVidia GTX750Ti / K2200	Intel Core i7 CPU: 6xCores 12xThreads 3.2Ghz Ram: 16GB GPU NVidia GTX750Ti / K2200	Intel Core i7 CPU: 8xCores 16xThreads 3.2Ghz Ram: 16GB GPU NVidia GTX750Ti / K2200

• Please contact Customer Clever Ltd where higher resolutions are being utilised or area of video capture is high traffic / large number of faces. PC to be networked and supporting 'Team Viewer' for remote diagnostic & support.
• Cameras are configured with MJPEG protocol at 8 FPS or better but can be H.264
• Professional environments (24/7 longer term deployments) single Xeon processor and
• Quadro K2200 NVIDIA GPU strongly recommended



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