| Detector | Descriptor | Detection time | Description time | Total time | Neighborhood mean | Neighborhood variance | Keypoints per image | Matches per image |
|-----------|------------|----------------|------------------|-------------|-------------------|-----------------------|---|--|
| | | | | | | | | |
| FAST | ORB | 0.0013128 | 0.000850464 | 0.002163264 | 7 | 0 | [419 427 404 423 386 414 418 406 396 401] | [24 226 220 218 226 220 235 251 226 239] |
| FAST | BRIEF | 0.00128775 | 0.000946069 | 0.002233819 | 7 | 0 | [419 427 404 423 386 414 418 406 396 401] | [34 229 253 233 247 224 243 251 260 238] |
| FAST | BRISK | 0.00131146 | 0.00296886 | 0.00428032 | 7 | 0 | [419 427 404 423 386 414 418 406 396 401] | [15 213 216 187 205 185 200 215 203 208] |
| HARRIS | BRIEF | 0.00469857 | 0.000486604 | 0.005185174 | 6 | 0 | [17 14 18 21 26 43 18 31 26 34] | [12 12 14 17 17 16 12 20 21] |
| HARRIS | BRISK | 0.00466627 | 0.00074109 | 0.00540736 | 6 | 0 | [17 14 18 21 26 43 18 31 26 34] | [11 9 10 11 16 14 12 21 17] |
| ORB | BRISK | 0.00545206 | 0.000976412 | 0.006428472 | 55.9928 | 630.76 | [92 102 106 113 109 125 130 129 127 128] | [3 60 65 65 76 72 83 83 73 72] |
| HARRIS | ORB | 0.00463058 | 0.00268886 | 0.00731944 | 6 | 0 | [17 14 18 21 26 43 18 31 26 34] | [11 11 14 17 19 19 13 21 20] |
| SHITOMASI | BRIEF | 0.00956219 | 0.000666637 | 0.010228827 | 4 | 0 | [125 118 123 120 120 113 114 123 111 112] | [96 93 92 89 92 93 85 91 85] |
| SHITOMASI | BRISK | 0.00988624 | 0.00131412 | 0.01120036 | 4 | 0 | [125 118 123 120 120 113 114 123 111 112] | [84 80 73 77 74 70 79 81 72] |
| SHITOMASI | ORB | 0.0127883 | 0.00060442 | 0.01339272 | 4 | 0 | [125 118 123 120 120 113 114 123 111 112] | [86 84 87 91 87 76 81 88 88] |
| ORB | BRIEF | 0.0139805 | 0.000386863 | 0.014367363 | 55.9928 | 630.76 | [92 102 106 113 109 125 130 129 127 128] | [16 37 38 37 53 42 64 58 62 59] |
| HARRIS | SIFT | 0.00471456 | 0.0159022 | 0.02061676 | 6 | 0 | [17 14 18 21 26 43 18 31 26 34] | [14 11 16 19 22 22 13 24 22] |
| ORB | ORB | 0.0200526 | 0.00306062 | 0.02311322 | 55.9928 | 630.76 | [92 102 106 113 109 125 130 129 127 128] | [3 40 57 49 54 57 68 71 62 72] |
| HARRIS | FREAK | 0.00637525 | 0.0254936 | 0.03186885 | 6 | 0 | [17 14 18 21 26 43 18 31 26 34] | [11 9 13 14 13 18 10 17 18] |
| SHITOMASI | SIFT | 0.0172888 | 0.014658 | 0.0319468 | 4 | 0 | [125 118 123 120 120 113 114 123 111 112] | [112 109 104 103 99 101 96 106 97] |
| BRISK | BRISK | 0.0305529 | 0.00213466 | 0.03268756 | 21.9444 | 213.688 | [264 282 282 277 297 279 289 272 266 254] | [3 138 144 133 144 139 155 137 150 158] |
| SHITOMASI | FREAK | 0.0093095 | 0.0242763 | 0.0335858 | 4 | 0 | [125 118 123 120 120 113 114 123 111 112] | [66 66 64 63 62 64 61 65 63] |
| BRISK | BRIEF | 0.0329735 | 0.000665722 | 0.033639222 | 21.9444 | 213.688 | [264 282 282 277 297 279 289 272 266 254] | [73 138 166 129 141 148 155 158 161 148] |
| BRISK | ORB | 0.0332503 | 0.00298685 | 0.03623715 | 21.9444 | 213.688 | [264 282 282 277 297 279 289 272 266 254] | [16 94 107 88 97 85 114 112 114 122] |
| ORB | FREAK | 0.00656191 | 0.0297043 | 0.03626621 | 55.9928 | 630.76 | [92 102 106 113 109 125 130 129 127 128] | [6 39 33 37 40 33 40 41 39 44] |
| FAST | FREAK | 0.00132598 | 0.0393916 | 0.04071758 | 7 | 0 | [419 427 404 423 386 414 418 406 396 401] | [16 178 181 156 182 159 179 196 164 171] |
| BRISK | FREAK | 0.0338911 | 0.0247552 | 0.0586463 | 21.9444 | 213.688 | [264 282 282 277 297 279 289 272 266 254] | [13 114 121 113 118 103 129 135 129 131] |
| FAST | SIFT | 0.00133883 | 0.0619424 | 0.06328123 | 7 | 0 | [419 427 404 423 386 414 418 406 396 401] | [2 316 325 297 311 291 326 315 300 301] |
| ORB | SIFT | 0.00515501 | 0.0901214 | 0.09527641 | 55.9928 | 630.76 | [92 102 106 113 109 125 130 129 127 128] | [7 67 79 78 79 82 95 95 94 94] |
| BRISK | SIFT | 0.0344213 | 0.0686218 | 0.1030431 | 21.9444 | 213.688 | [264 282 282 277 297 279 289 272 266 254] | [3 182 193 169 183 171 195 194 176 183] |
| SIFT | BRISK | 0.114456 | 0.0010749 | 0.1155309 | 5.03738 | 35.8244 | [138 132 124 137 134 140 137 148 159 137] | [16 64 66 62 66 59 64 64 67 80] |
| SIFT | BRIEF | 0.149637 | 0.000461567 | 0.150098567 | 5.03738 | 35.8244 | [138 132 124 137 134 140 137 148 159 137] | [61 86 78 76 85 69 74 76 70 88] |
| SIFT | FREAK | 0.121835 | 0.0382852 | 0.1601202 | 5.03738 | 35.8244 | [138 132 124 137 134 140 137 148 159 137] | [34 65 72 64 66 59 59 64 65 79] |
| AKAZE | BRISK | 0.171399 | 0.00153623 | 0.17293523 | 7.69915 | 12.5121 | [166 157 161 155 163 164 173 175 177 179] | [0 126 112 121 117 114 119 134 140 127] |
| AKAZE | ORB | 0.19414 | 0.0025383 | 0.1966783 | 7.69915 | 12.5121 | [166 157 161 155 163 164 173 175 177 179] | [5 102 96 96 84 90 116 103 113 118] |
| AKAZE | FREAK | 0.178742 | 0.0229848 | 0.2017268 | 7.69915 | 12.5121 | [166 157 161 155 163 164 173 175 177 179] | [0 103 105 93 99 97 115 126 118 117] |
| AKAZE | BRIEF | 0.212803 | 0.000581218 | 0.213384218 | 7.69915 | 12.5121 | [166 157 161 155 163 164 173 175 177 179] | [31 108 116 110 109 116 129 133 135 131] |
| AKAZE | SIFT | 0.173924 | 0.0409071 | 0.2148311 | 7.69915 | 12.5121 | [166 157 161 155 163 164 173 175 177 179] | [0 134 134 130 136 137 147 147 154 151] |
| SIFT | SIFT | 0.121442 | 0.110334 | 0.231776 | 5.03738 | 35.8244 | [138 132 124 137 134 140 137 148 159 137] | [82 81 85 93 90 81 82 102 104] |
| AKAZE | AKAZE | 0.200795 | 0.185396 | 0.386191 | 7.69915 | 12.5121 | [166 157 161 155 163 164 173 175 177 179] | [128 128 125 117 121 132 137 140 144] |