

# Recommended Phones and Choosing a Phone

Choosing a phone for your CommCare project can be a hard decision. The Dimagi team has worked to make this decision a bit easier by testing numerous different phone models and documenting their performance. This page will provide you with the results of our testing as well as tips on how to choose the right phone for your project.

## Issue with Huawei Phones produced May 2019 and onwards

Due to Google's revocation of Huawei's Android license, any Huawei devices produced after May 2019 would not support any Google apps including apps on the Google Play app store. This prohibits the ability to install and update CommCare using the Google Play app store on these devices and hence these Huawei devices are currently **not recommended** for CommCare usage.

## Procure a Mobile Device Management Tool

We strongly recommend you procure a mobile device management tool to manage your devices, the data used on the devices, the apps used, and the time spent on each app. Dimagi has an MDM solution you can consider called [Focus](#) that is tailor-made for international development projects with low-or-no connectivity. We have seen large i-NGO's use MDM solutions to secure their patient/user data, save money with restricted data usage and increase their frontline productivity.

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## Recommended Phones/Tablets

Phone Model	U S T e s t e d?	Af ric a T e s t e d?	In di a T e s t e d?	Performance Notes?	Other Notes
<b>ANDROID PHONES - <a href="#">Click here to learn more about selecting an Android phone</a></b>					
Samsung Galaxy Mini		Y			<ul style="list-style-type: none"> <li>• Tested in West Africa</li> </ul>
Samsung Galaxy S GT-7562			Y	<ul style="list-style-type: none"> <li>• successfully supported Hindi script in India</li> <li>• largely supports Odiya script</li> </ul>	<ul style="list-style-type: none"> <li>• This model is being replaced by the Samsung Galaxy S Duos 2 GT-7582 in India (untested)</li> </ul>
Samsung Galaxy Xcover S5690		Y		<ul style="list-style-type: none"> <li>• limited internal memory, had to remove other apps but works well with only CommCare</li> <li>• water and shock resistant</li> </ul>	<ul style="list-style-type: none"> <li>• Used in Mozambique</li> </ul>
LAVA Iris 349+			Y	<ul style="list-style-type: none"> <li>• successfully supported Hindi script in India</li> </ul>	<ul style="list-style-type: none"> <li>• OUT OF PRODUCTION. Lava is coming out with a replacement model (Lava Iris 352e / 354e) - will need to be tested</li> </ul>
Samsung Galaxy Win Duos (GT-I8552)		Y		<ul style="list-style-type: none"> <li>• has difficulty scanning barcode off bright computer screen; when downloading app from CCHQ</li> </ul>	<ul style="list-style-type: none"> <li>• Also tested in Nepal</li> <li>• Also tested in Thailand</li> </ul>
Samsung Galaxy Pocket Duos (GT-S5302)		Y	Y		<ul style="list-style-type: none"> <li>• Tested in Senegal</li> <li>• Tested in India</li> </ul>

Samsung Galaxy ACE NXT			Y	<ul style="list-style-type: none"> <li>• Successfully supported Hindi script in India</li> <li>• Successfully supported location capture through GPS</li> <li>• Had difficulties submitting forms with image capture</li> </ul>	<ul style="list-style-type: none"> <li>• GPS supported</li> <li>• 3G supported</li> <li>• 4GB internal memory; expandable to 32 GB through microSD</li> </ul>
Samsung Galaxy ACE S5830		Y		<ul style="list-style-type: none"> <li>• good screen size for multimedia</li> <li>• low performance, slow to load big forms</li> </ul>	<ul style="list-style-type: none"> <li>• Used in Mozambique</li> </ul>
Samsung Galaxy Core Prime SM-360H					<ul style="list-style-type: none"> <li>• In Myanmar, stock Android 4.4 Burmese Unicode font has been replaced by Zawgyi</li> </ul>
Samsung Galaxy Trend					
Samsung Galaxy Young Duos (S6310)		Y		<ul style="list-style-type: none"> <li>• Successfully deployed very large forms (600+ questions)</li> <li>• Good internal memory</li> </ul>	<ul style="list-style-type: none"> <li>• Used in Mozambique</li> </ul>
Samsung Galaxy SIII Fame Lite S6790		Y			<ul style="list-style-type: none"> <li>• not available in India</li> <li>• Also tested in West Africa</li> </ul>
Huawei Ascend G510	Y				<ul style="list-style-type: none"> <li>• Also tested in Guatemala</li> </ul>
Huawei Ascend Y 511		Y		<ul style="list-style-type: none"> <li>• Can handle large case loads (1500 cases)</li> </ul>	<ul style="list-style-type: none"> <li>• Tested in East Africa; used in large-scale deployment in Kenya</li> </ul>
Moto G	Y	Y	Y		<ul style="list-style-type: none"> <li>• Used by most Dimagi Field Staff (FM) in India, West Africa and the US</li> <li>• The Moto G 3<sup>rd</sup> Gen comes in a US and Euro version. They are not cross market compatible. If an FM will be spending significant time in the US, we would recommend a different device.</li> </ul>
Moto G (Turbo)			Y		<ul style="list-style-type: none"> <li>• The Moto G Turbo comes in a US and Euro version. They are not cross market compatible. If an FM will be spending significant time in the US, we would recommend a different device.</li> </ul>
Tecno H3		Y			<ul style="list-style-type: none"> <li>• Implemented in Benin</li> <li>• Available for purchase locally in limited countries</li> </ul>
Samsung Galaxy J2			Y	<ul style="list-style-type: none"> <li>• Successfully displayed English and Hindi Text</li> <li>• Does not render Telugu and Marathi text.</li> </ul>	<ul style="list-style-type: none"> <li>• India Tested</li> </ul>
Samsung Grand Prime 4G			Y		<ul style="list-style-type: none"> <li>• India Tested</li> </ul>
Micromax Canvas Juice 4 Q382			Y		<ul style="list-style-type: none"> <li>• India Tested</li> </ul>
Karbons Smart Titanium S205			Y		<ul style="list-style-type: none"> <li>• India Tested</li> <li>• Limited availability (India only)</li> </ul>
LG K7LTE			Y		<ul style="list-style-type: none"> <li>• India Tested</li> <li>• Limited availability (India only)</li> </ul>

Alcatel One Touch Pixi 3		Y		<ul style="list-style-type: none"> <li>• Smaller screen size. Can make it difficult to view case list/case detail screen depending on configuration</li> </ul>	<ul style="list-style-type: none"> <li>• Africa Tested</li> </ul>
Samsung Galaxy Grand Neo Plus			Y		<ul style="list-style-type: none"> <li>• India Tested</li> </ul>
<b>ANDROID TABLETS - <a href="#">Click here to learn more about selecting an Android tablet</a></b>					
Samsung Galaxy Tab 4	Y	Y	Y	<ul style="list-style-type: none"> <li>• supports Hindi/Nepali script</li> </ul>	
Samsung Galaxy Tab 3	Y	Y	Y	<ul style="list-style-type: none"> <li>• supports Hindi/Nepali script</li> </ul>	
Samsung Galaxy Tab 3 V (Model T116NY)			Y		<ul style="list-style-type: none"> <li>• India Tested</li> </ul>
Samsung Galaxy Tab 3 Lite (Model T111)			Y		<ul style="list-style-type: none"> <li>• India tested</li> </ul>
Samsung Galaxy Tab 2	Y	Y	Y	<ul style="list-style-type: none"> <li>• supports Hindi/Nepali script</li> </ul>	
Samsung Galaxy Tab A SM-T510		Y		<ul style="list-style-type: none"> <li>• used in Mali with case loads as high as 25,000</li> </ul>	
Micromax Funbook Alpha			Y	<ul style="list-style-type: none"> <li>• partially supports Hindi script (Hindi script- vowel markings are inconsistent)</li> </ul>	
Micromax Funbook Infinity			Y		
Videocon VT75C			Y	<ul style="list-style-type: none"> <li>• processor is not very fast out of the box</li> </ul>	
Nexus 7			Y	<ul style="list-style-type: none"> <li>• does not support Lao script</li> </ul>	<ul style="list-style-type: none"> <li>• Also tested in Myanmar</li> </ul>
Onda V975s Core4				<ul style="list-style-type: none"> <li>• Android 4.2.2 ROM includes the Zawgyi font by default if bought in Myanmar</li> </ul>	<ul style="list-style-type: none"> <li>• Also tested in Myanmar</li> </ul>
Datamini TA7			Y	<ul style="list-style-type: none"> <li>• Could not render Telugu text</li> </ul>	<ul style="list-style-type: none"> <li>• India Tested</li> </ul>
iBall Slide 3Gi71			Y		<ul style="list-style-type: none"> <li>• India Tested</li> </ul>
ASUS Zenpad C7.0			Y		<ul style="list-style-type: none"> <li>• India Tested</li> </ul>
Forstar FT 710x			Y	<ul style="list-style-type: none"> <li>• Poor Battery performance</li> </ul>	<ul style="list-style-type: none"> <li>• India Tested</li> </ul>
Alpha Tablet S707-DC			Y		<ul style="list-style-type: none"> <li>• India Tested</li> </ul>
<b>J2ME - <a href="#">Click here to learn more about selecting a J2ME phone</a></b>					
Nokia C2-01	Y	Y	Y	<ul style="list-style-type: none"> <li>• best performing J2ME phone</li> </ul>	<ul style="list-style-type: none"> <li>• going out of production soon</li> </ul>

Nokia 206	Y	Y	Y	<ul style="list-style-type: none"> <li>Has had some trouble running large forms. Before procuring you should test your app on a sample phone. May not handle large/complex forms well. For complex and large apps, consider low end Android devices instead of J2ME</li> </ul>	<ul style="list-style-type: none"> <li>going out of production soon</li> </ul>
Nokia 109	Y	Y	Y	<ul style="list-style-type: none"> <li>Has had some trouble running large forms. Before procuring you should test your app on a sample phone. May not handle large/complex forms well. For complex and large apps, consider low end Android devices instead of J2ME</li> </ul>	
Nokia 208	Y	Y	Y	<ul style="list-style-type: none"> <li>Commcare Login defaults to alphanumeric (even though setting on HQ is numeric) which is a pain for low literate users &amp; if icons are used in the main menu, the screen shows only black. If you want either of these features, do not use this phone until further notice.</li> </ul>	

## Phones Known to Work (not formally tested)

Dimagi Field Managers as well as other adventurous CommCare users have tested alternate phone models in the field with successful results. We have listed these phones below. These phones are good options for CommCare projects. As with all phones not on our recommended phone list, we suggest testing the phone to ensure it meets your project requirements before procuring multiple phones.

Phone Model	US Tested?	Africa Tested?	India Tested?	Performance Notes?	Other Notes
<a href="#">HCL ME Sync 1.0 (U3)</a>			Y	Supports multiple Indian languages	
Reliance 3G Tablet			Y	Does not support Hindi font	
Samsung Galaxy Young (GT-S6312)			Y	Supports Hindi, Odiya fonts in India	
<a href="#">Samsung Xcover 2 (GT-S7710)</a>			Y	Water and dust proof	
<a href="#">Samsung Galaxy Star (GT-S5282)</a>				Has been tested by FMs for Hindi & Kannada support, GPS works. Yet to load test and go through checklist	
Samsung Galaxy Star 2				Has not been formally load tested for performance. But, has been used in CommCare testing	
<a href="#">Samsung Star Pro</a>				has been tested by FMs; works fine and supports Hindi, however processor feels significantly slower out-of-the-box	
<a href="#">Samsung Galaxy Pocket (GT-S5301)</a>				Has been tested by FMs; works fine <b>Note:</b> probably has the smallest screen for android, but is usually around \$100	
Samsung Galaxy Y (S5360)		Y		Will not allow installation on internal memory, only on SD card  Low internal memory	<ul style="list-style-type: none"> <li>Used in Mozambique</li> </ul>
<a href="#">Samsung Galaxy Y Pro (GT-B5510)</a>				(works with most apps, but qwerty keyboard can be a bit problematic). <b>Note:</b> has a physical blackberry-style QWERTY keyboard.	
<a href="#">Samsung Galaxy Note II (GT-N7100)</a>				Has been tested by FMs; works fine	
<a href="#">Samsung Galaxy Ace Plus (GT-S7500)</a>				Has been tested by FMs; works fine	
<a href="#">Samsung Galaxy S II (SGH-I777)</a>				Has been tested by FMs; works fine	
Tecno B3		Y		Widely deployed in West Africa for two projects but not formally tested.	Possibly out of stock and replaced by Tecno H3, which has been tested, deployed and found to work well
Tecno H3				Has been deployed and found to work well	
Tecno Y3		Y		Has been tested by FMs; works fine	Used in a Kenya deployment
Huawei Ascend Y360		Y		Has been tested by FMs; works fine	Used in a Kenya deployment

## Phones with Known Limitations

The phones listed below all have known limitations. These phones may still be good options for a CommCare project depending on the projects needs. As with all phones not on our recommended phone list, we suggest testing the phone to ensure it meets your project requirements before procuring multiple phones.

Phone Model	US Tested?	Africa Tested?	India Tested?	Performance Notes?	Other Notes
Samsung Galaxy Y				<ul style="list-style-type: none"> <li>• <b>Problem- Default Sound Recorder:</b> The sound recorder on the Galaxy Y improperly accepts the intent to record audio, and does not return the proper information to CommCare for audio recording questions. <ul style="list-style-type: none"> <li>◦ <b>Workaround:</b> A different sound recording app can be installed from the Google Play market to replace the defective stock application.</li> </ul> </li> <li>• <b>Problem:</b> Does not fully support Odiya font</li> </ul>	
Samsung Galaxy Tab 3				<ul style="list-style-type: none"> <li>• <b>Problem:</b> Does not record audio, whether with default application or third-party recording application.</li> </ul>	
Samsung Galaxy Tab 10.1		Y		<ul style="list-style-type: none"> <li>• <b>Problem:</b> Runs Android 3.0/3.1 out of the box and the behavior with CommCare can sometimes lead to apps not working.</li> </ul>	
Samsung Galaxy S Duos				<ul style="list-style-type: none"> <li>• <b>Problem:</b> There is a serious bug in the phone's software that causes CommCare to crash if number questions are added to the form. This occurs only on certain devices. Not recommended for use.</li> </ul>	
Lava Iris 351				<ul style="list-style-type: none"> <li>• <b>Problem:</b> Does not fully support Hindi font</li> </ul>	
Lava Iris 349				<ul style="list-style-type: none"> <li>• <b>Problem:</b> Does not support GPS</li> </ul>	
Lava Iris 349+				<ul style="list-style-type: none"> <li>• <b>Problem:</b> Does not support GPS</li> </ul>	
Nokia ASHA 206				<ul style="list-style-type: none"> <li>• <b>Problem:</b> Frequently requires manual GPRS configuration.</li> <li>• <b>Problem:</b> Less memory/CPU than other Nokia models. Struggles with large complex forms.</li> </ul>	
Nokia 201				<ul style="list-style-type: none"> <li>• Will have significantly reduced performance with case loads in your applications &gt;150</li> </ul>	
Nokia 205				<ul style="list-style-type: none"> <li>• Will have significantly reduced performance with case loads in your applications &gt;150</li> </ul>	
Nokia 109				<ul style="list-style-type: none"> <li>• Only 16MB RAM (not recommended for larger apps or apps with larger case lists)</li> </ul>	
Nokia e72				<ul style="list-style-type: none"> <li>• <b>Problem:</b> Only allows for data push, cannot remote update version, cannot restore user data</li> </ul>	
Huawei G730-C00				<ul style="list-style-type: none"> <li>• <b>Problem:</b> Android 4.1.2, CommCare crashes if "Default storage location" is switched between runs</li> <li>• <b>Problem:</b> No WIFI Direct</li> <li>• <b>Problem:</b> GSM is 2G</li> <li>• <b>Problem:</b> When bought in Myanmar, not Unicode compatible font Zawgyi is installed</li> <li>• <b>Problem:</b> Load of Chinese bloatware</li> </ul>	
Micromax P480			Y	<ul style="list-style-type: none"> <li>• Could not read external SD card</li> <li>• Very poor Battery performance</li> <li>• Cannot render Telugu or Marathi text</li> </ul>	<ul style="list-style-type: none"> <li>• India Tested</li> </ul>

Penta T-Pad WS704Q			Y	<ul style="list-style-type: none"> <li>• Could not read external SD Card</li> <li>• Can render English and Hindi text</li> <li>• Cannot render Telugu or Marathi text</li> </ul>	<ul style="list-style-type: none"> <li>• India Tested</li> </ul>
Lava Model P7+			Y	<ul style="list-style-type: none"> <li>• Does not have Telugu or Marathi as language options</li> <li>• Below average processor speed.</li> </ul>	<ul style="list-style-type: none"> <li>• India Tested</li> </ul>
Infocus M370			Y	<ul style="list-style-type: none"> <li>• Does not have Telugu or Marathi as language options</li> </ul>	<ul style="list-style-type: none"> <li>• India Tested</li> </ul>
LG Max X160			Y	<ul style="list-style-type: none"> <li>• Does not have Telugu or Marathi as language options</li> </ul>	<ul style="list-style-type: none"> <li>• India Tested</li> </ul>
Alcatel OneTouch P310x		Y		<ul style="list-style-type: none"> <li>• Recommended Barcode scanner does not work with this device.</li> <li>• Issues with submitting large Multimedia files</li> </ul>	<ul style="list-style-type: none"> <li>• Africa Tested</li> </ul>
Samsung Galaxy J5 SM-J500			Y	<ul style="list-style-type: none"> <li>• Issues with stock camera. Pictures do not get saved when used in CommCare.</li> </ul>	<ul style="list-style-type: none"> <li>• India Tested</li> </ul>

## Unsupported Phones

Dimagi actively searches low-cost Java feature phones on the market and frequently tests them if they support CommCare and their performance. Phone models that have been tested and **do not** support CommCare include:

- Nokia 108
- Nokia 220
- Nokia 225
- Nokia 230
- Nokia ASHA 501
- Samsung Metro Duos (C3322)
- Samsung Metro Duos (E2252)
- Samsung Guru Music
- LG A390
- Lava KKT31C
- Micromax X264
- Lava Ivory S1
- Lava Ivory Pop
- Ubislate I3G7
- Alpha Onida
- Lenovo Yoga Tablet 10

## Counterfeit Phones

While it rarely happens, there have been a couple of projects during which FMs and the organization discovered that the phones purchased were counterfeit. While it is unclear whether there is a standard way, we propose the following for assessing the quality of the phones provided by the partner.

Counterfeit indicators for Android phones --

- Google Play Store is missing. It is not even worth attempting to download it via Google.com, as this is often a challenge (or simply will not work).
- The phone presents Chinese characters. Phones manufactured in China are notoriously of bad quality.
- Validate the IMEI number. Generally, the 7th and 8th digits of the 15-digit number will tell you where the phone was manufactured (hence, its likely quality). See here for more information: <http://www.spotafakephone.com/how-to-tell.cfm> and here for IMEI testing: <http://www.numberingplans.com/?page=analysis&sub=imeinr>.
- Your CommCare application crashes when you arrive at a date question.
- Batteries die much more quickly than they should.

- The phone has difficulty connecting to the internet.
- Any other missing features that the phone **should** have. It is important to know the phone model's functionality before purchasing so as to check whether that functionality is missing on the phone you are testing.