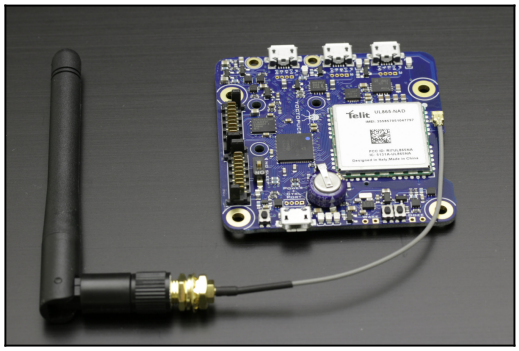
YoctoHub-GSM-3G-NA



The YoctoHub-GSM-3G-NA is a wireless-enabled module that can host three Yoctopuce modules to access them remotely through a 3G GSM cellular network (UMTS and HSPA). It can be powered either by a Micro-B USB cable and a regular phone charger, or a 5V battery pack.

The radio module supports the two GSM frequency bands 850 Hz and 1900 MHz used in North-America, Caribbean and Latin America. For a detailed list of frequency bands supported in each country, please refer to the Wikipedia page GSM_frequency_bands.

You can use the YoctoHub-GSM-3G-NA in the same way as a VirtualHub running on a little computer, but it is much easier to setup and maintain than a computer. It is smaller and consumes less. It is compatible out-of-the-box with all existing applications using Yoctopuce API. As for the VirtualHub, it can run autonomously using HTTP callbacks.

Moreover, the YoctoHub-GSM-3G-NA features a built-in clock timer, that makes it possible to put the device into low-power deep sleep and wake-up automatically at predefined times. This makes it possible to reduce power consumption to 15uA while sleeping, which is crucial for applications running on battery or solar panels. The YoctoHub-GSM-3G-NA only needs a few seconds of wake-up time to post data on an web server using the HTTP callback.

You can connect three Yoctopuce modules can be connected directly, one of which can be fixed directly on the YoctoHub-GSM-3G-NA and connected using a Board2Board-127 connector. More devices can be connected, thanks to the YoctoHub-Shield extension. The YoctoHub-GSM-3G-NA can power Yoctopuce devices up to 2A.

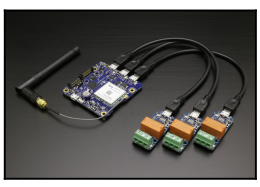
The device is provided with an articulated antenna (9cm, with SMA connector) and a connection cable (uFL to SMA).

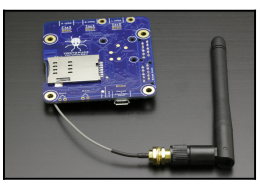
Warning: although the 3 downstream ports hosting Yoctopuce devices use micro-B USB connectors, the YoctoHub-GSM-3G-NA uses a specific protocol simpler than USB to talk to the devices. Therefore, it is not possible to drive or even to power a regular (non-Yoctopuce) device using the YoctoHub-GSM-3G-NA. It is not possible either to use a regular USB hub (such as the Micro-USB-Hub) on the downstream ports. If you need more downstream ports for Yoctopuce devices, you can use a YoctoHub-Shield.

Specifications

Product ID	YHUBGSM4
USB connector	micro-B
Thickness	9.5 mm
Width	58 mm
Length	60 mm
Weight	34 g
Chipset	Telit UL865-NAD
Frequency	850 and 1900 MHz
IEC protection class	class III
Normal operating temperature	5...40 °C
Extended operating temperature‡	-20...70 °C
USB consumption	100 mA
RoHS compliance	RoHS III (2011/65/UE+2015/863)
USB Vendor ID	0x24E0
USB Device ID	0x0061
Suggested enclosure	YoctoBox-HubWlan-Transp
Harmonized tariff code	8542.3190
Made in	Switzerland

‡ The extended temperature range is defined based on components specifications and has been tested during a limited duration (1h). When using the device in harsh environments for a long period of time, we strongly advise to run extensive tests before going to production.





For more information: www.yoctopuce.com/EN/products/yoctohub-gsm-3g-na