MA APPROVED ECU Motec M130 2022 Information

What is the ECU?
The ECU is the Motec M130 ECU, with an ASBK specific firmware and is an option to manufacturers kit ECUs for use in Superbike class from 2022.

What are the features?
The Motec M130 ECU is a fully featured racing ECU, with fast and accurate control with complete control often not available in the standard or kit ECU options. This ECU & associated components are also completely transferable from different brand bike to bike, so if a team was to change manufacturer, the exact same ECU can be used on any superbike.

When is it available?
The ECU hardware is currently available, however the final ASBK firmware is being developed and will be finalised by early October. If a competitor wishes to start wiring and engine development earlier, the Motec GPR-130 package is currently available from Motec Dealers. This can then be upgraded and locked at no charge to the ASBK specific firmware when it becomes available.

Where can I buy it and how much will it cost?
The approved ECU & kit can be purchased from any Motec dealer, be sure to tell the dealer it is the ASBK specification Motec M130 you are wanting to purchase. There is a link to the Motec dealer website below for your reference. The Motec M130 ECU will come pre-loaded with the correct firmware for the ASBK championship and start file for the brand of machine you nominate at a RRP of approximately $3000 + GST. Additional tuning will be required to achieve the best results from the Motec M130.

Motec Dealers
https://www.motec.com.au/dealers/dealersau/

What will I need?
The components required to make the most of this superbike electronics package are:
- Motec M130 ECU, approx. $3000 + GST
- Dashboard,
- IGN4 – ignition driver
- Wiring loom
- Handlebar switches – for changing ECU settings by the rider
- Lambda to CAN (LTC) – For air fuel tuning
- Suspension potentiometers - for Data logging & Wheelie control

The following suppliers of additional hardware are a guide only.

Handlebar switches
Aviorace – Italy https://aviorace.it/en
5 button / 3 button CAN bus switches – approx. € 300 / €230

Wiring loom
Proloom, VIC, Australia – ryan@proloom.com.au
NA Autosport, QLD Australia – sales@naautosport.com.au
Tecnocable SRL – Italy tecnocable@tecnocable.net
Mototronics – UK – info@mototronics.co.uk

The following applies;

1. The MA approved ECU (Motec M130) may be used, with the ASBK firmware as per the bike and manufacturer.
   a. The Communication Port connector in the wiring harness must be the MA specified connector or provide an adaptor to the MA specified type.
   b. The RPM limit maximum is equal to the Manufacturer Kit ECU.
2. Wiring harness is open as per the current regulations.

Motec M130		Notes
Ignition		Adjustable
Fuelling		Adjustable
Rev Limiter		Limits Engine Speed - different Rev limits per gear (Note 1b. above)
Quickshifter		Control Engine cut on upshift and auto blip on downshift
Drive By Wire		Controls the opening of the butterflies dependant on the riders grip position in place of throttle cables. Has different throttle tables for each gear to restrict throttle opening in lower gears
Traction Control	**8** Rider modes	Limits rear wheel spin by using ignition retard then cut, will not close throttles to limit power
Wheelie Control	Either on or Off	Will use ignition retard then cut, will not close throttles to limit power
Launch Control	Either On or Off	Will use ignition retard then cut, and limit throttle opening to limit power
Engine Brake	3 Rider Modes	Opens Throttles if rear wheel is locking up. Can have different Engine Brake settings for each gear
Pit Lane Speed Limiter	Either on or Off	Limits throttle opening and cuts ignition to limit vehicle speed

There is no ability for Distance or GPS Based Mapping as the ASBK firmware is locked and MA & ASBK Technical Departments will be able to confirm that there have been no modifications made.

This ECU uses mainly OEM sensors. However, the following is to be used with the Motec M130 ECU:

- IGN4 - Used to drive ignition coils and are part of the harness if required. (Harness is free)
- GPS - Used to mark start finish line for lap timing (Currently allowed)
- Gear quick shifter, OEM uses digital sensor, Motec uses strain gauge similar to that of Honda sensor (Currently allowed).
- Suspension potentiometers for data logging & Wheelie Control
- Oil Temperature and Oil Pressure sensors
- Front and Rear Brake Pressure sensors
- Lambda sensor(s)