

## HHM Compatibility

The following table shows which Hand-held Monitor versions are compatible with specific Genius I/O, Field Control, and related products.

Note that the functionality of an older Hand-held Monitor can be upgraded by replacing its firmware PROM. (PROM installation instructions are in chapter 2).

Product Type	Product Catalog Number	Requires this Hand-held Monitor Version (or later)
24/48VDC Analog 4 Input / 2 Output block	IC660BBA020	any
24/48VDC RTD 6 Input block	IC660BBA021	IC660HHM501B(v2.0)
24/48VDC Thermocouple 6 Input block	IC660BBA023	IC660HHM501D(v3.5)
24/48VDC Current-Source Analog 4 Input / 2 Output block	IC660BBA024	IC660HHM501E(v3.7)
24/48VDC Current-Source Analog 6 Output block	IC660BBA025	IC660HHM501G(v4.0)
115VAC Analog 4 Input / 2 Output block	IC660BBA100	any
115VAC / 125VDC RTD 6 Input block	IC660BBA101	IC660HHM501B(v2.0)
115VAC / 125VDC Thermocouple 6 Input block	IC660BBA103	IC660HHM501D(v3.5)
115VAC / 125VDC Current-Source Analog 4 Input / 2 Output block	IC660BBA104	IC660HHM501E(v3.7)
115VAC / 125VDC Current-Source Analog 6 Output block	IC660BBA105	IC660HHM501G(v4.0)
24/48VDC Source 16I / Oblock	IC660BBD020	any
24/48VDC Sink 16I / Oblock	IC660BBD021	any
24VDC Source 16I / Oblock	IC660BBD022	any
24VDC Sink 16I / Oblock	IC660BBD023	any
12/24VDC Source 32I / Oblock	IC660BBD024	IC660HHM501B(v2.0)
5/12/24VDC Sink 32I / Oblock	IC660BBD025	IC660HHM501E(v3.0)
115VAC 8I / Oblock	IC660BBD100	any
115VAC 8I / O Low Leakage block	IC660BBD101	any
115VAC 16 Input block	IC660BBD110	IC660HHM501B(v2.0)
115VAC / 10-30VDC High-Speed Counter block, v1.x	IC660BBD120	IC660HHM501D(v3.5)
115VAC / 10-30VDC High-Speed Counter block, v2.0	IC660BBD120D	IC660HHM501G(v4.0)
115/230VAC Relay Normally-closed 16 Output block	IC660BBR100	IC660HHM501B(v2.0)
115/230VAC Relay Normally-open 16 Output block	IC660BBR101	IC660HHM501B(v2.0)
115VAC / 125VDC 8I / O Isolated Block with Failed Switch Diagnostic	IC660BBS100	any
115VAC / 125VDC 8I / O Isolated without Failed Switch Diagnostic	IC660BBS101	any
115-230VAC / 125VDC Power TRAC block, v.2.2 or earlier	IC660BPM100	IC660HHM501D(v3.5)
115-230VAC / 125VDC Power TRAC block, v.2.3	IC660BPM100C	IC660HHM501G(v4.0)
Series Five Genius Bus Controller	IC655BEM510	IC660HHM501C(v3.0)
Series 90-70 Genius Bus Controller	IC697BEM731	IC660HHM501F(v3.8)
Series Six Genius Bus Controller with Diagnostics	IC660CBB902	any
Series Six Genius Bus Controller without Diagnostics	IC660CBB903	any
Series 90-30 GENIUS Communications Module	IC693CMM301	IC660HHM501C(v3.0)
GENIUS Network Interface (GENI) module	IC660ELB905	any
IBM PC Interface Module (PCIM)	IC660ELB906	any
GENIUS Network Interface (GENI) module with inverted connector	IC660ELB910	any
Series 90-70 Remote I/O Scanner	IC697BEM733	IC660HHM501G(v4.0)
24/48VDC Bus Switching Module (BSM)	IC660BSM021	any
115VAC / 125VDC Bus Switching Module (BSM)	IC660BSM115	
Field Control products (all)	IC670xxxxxx	IC660HHM501J(v4.6)

## HHM Specifications

<b>Operating temperature</b>	0–60 C (32–140 F)
<b>Storage temperature</b>	–40 to +70 C (–40 to 158 F)
<b>Humidity</b>	5–95% (non-condensing)
<b>Weight:</b> <b>without case</b>	1.3 lbs (0.6 Kg)
<b>with case</b>	1.8 lbs (0.8 Kg)
<b>Size (HxWxD):</b> <b>without case</b>	8.00" x 3.75" x 1.25 (cmx)
<b>with case</b>	10.85" x 4.30" x 2.25"
<b>Required AC power (for battery charger)</b>	115/230VAC 15%, 47–63 Hz (16-hour charging period for IC660BPM500B. 8-hour charging period for IC660BPM500A, now discontinued.)
<b>Fully charged operation</b>	6 hours
<b>Display characters</b>	4 lines each of 16 LCD (0.2" - 5 mm high)
<b>Keyboard</b>	20 sealed keys with tactile feedback
<b>Features</b>	Performs Genius I/O block configuration, monitors I/O data on Genius bus, displays diagnostic information.
<b>Display language</b>	English, German, French, or Italian
<b>Drop Test</b>	Survives drop from 4 feet (1.2 meters) to concrete floor landing on any surface or corner without affecting its operation.
<b>Data Rates</b>	153.6 Kbaud standard, 153.5 Kbaud extended, 76.8 Kbaud, 38.4 Kbaud

## Ordering Information

Description	Catalog Number
Hand-Held Monitor (includes all items listed below)	IC660HHM501
Cable from HHM to I/O Block	IC660HHC005
Battery Pack	IC660BPM500
Battery Charger	IC660BCM501

## Optional Accessories

**External HHM Connector:** A panel-mountable or DIN rail-mountable HHM connector (catalog number 44A736310-001-R001) is available. It can be used to provide a permanent HHM connection point on a Genius bus. See chapter 2 for a description.

**230VAC Power Adapter:** An optional 230VAC Power Adapter (IC660MCA512) can be used to connect the Hand-held Monitor Charger to variety of 230 VAC power outlets by means of a standard computer cable (not supplied). See chapter 2 for a description.

**Extra HHM Keys:** For applications requiring extra keys for the Hand-held Monitor, a group of five sets can be ordered separately. The catalog number is IC660MKS511.