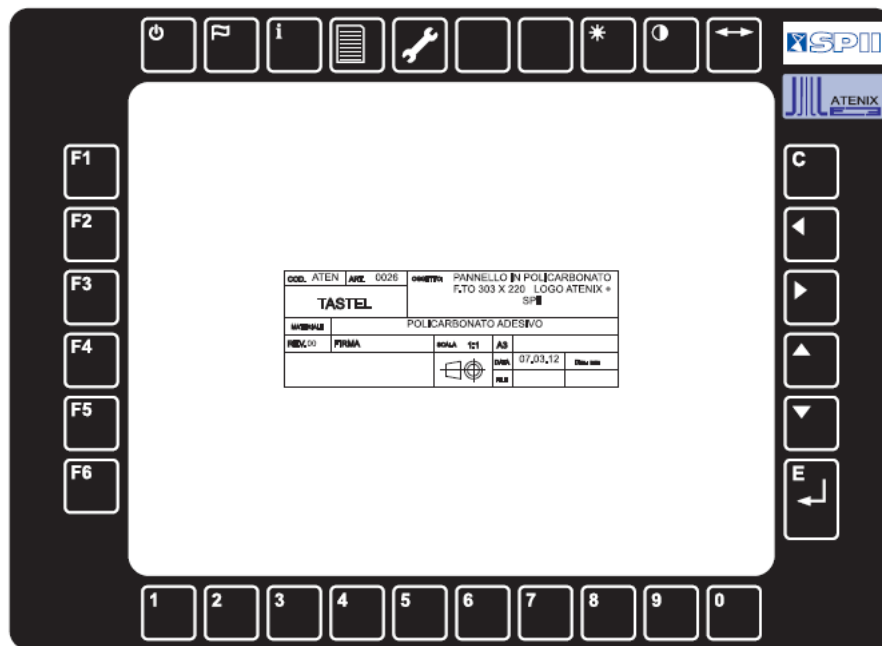


Product specification

ATX SPII TOUCH SCREEN & SOFT KEY DMI ATX-K060-MMI-39-0



Emesso da / *Edited by*
A.Colombo

Controllato da / *Checked by*
A.Guzzi

Approvato da / *Approved by*
S. Zuffetti

Data / *Date*

Firma / *Sign*

Firma / *Sign*

Firma / *Sign*

14.04.2014



SUMMARY

1. DOCUMENT REVISIONS	3
2. ACRONIMOUS	3
3. REFERENCE DOCUMENTS	4
4. MAIN CHARACTERISTICS.....	5
4.1. Embedded Processor Unit.....	5
4.2. Display	5
4.3. Operating Systems	5
4.4. Power Supply.....	5
4.5. Physical data	5
4.6. Approval/Compliances.....	6
4.7. Electrical Interface	6
5. DIMENSIONS	7

1. DOCUMENT REVISIONS

Modifica <i>Issue</i>	Descrizione delle modifiche <i>Revision Description</i>	Eseguito <i>Edited by</i>	Controllato <i>Controlled</i>	Approvato <i>Approved</i>	Data <i>Date</i>
00	Emission	A.Colombo	A. Guzzi	S. Zuffetti	14.04.2014

2. ACRONIMOUS

Sigla <i>Definitions</i>	Descrizione <i>Description</i>

3. REFERENCE DOCUMENTS

	Title	year
CEI EN 50155	Railway applications – Electronic equipment used on rolling stock	2008
CEI EN 50121-1	Railway applications - Electromagnetic compatibility - Part 1: General	2006
CEI EN 50121-3-2	Railway applications – Electromagnetic compatibility – Part 3-2: Rolling stock – Apparatus	2006
CEI EN 50124-1	Railway applications - Insulation coordination - Part 1: Basic requirements - Clearances and creepage distances for all electrical and electronic equipment	2001
CEI EN 50125-1	Railway applications - Environmental conditions for equipment - Part 1: Equipment on board rolling stock	2000
CEI EN 50153	Railway applications - Rolling stock - Protective provisions relating to electrical hazards	2002
EN 55011 / +A2	Industrial, scientific and medical (ISM) radio-frequency equipment electromagnetic disturbance characteristics – limits and methods of measurement	2007
EN 61000-4-2 / +A1 / +A2	Electromagnetic compatibility (EMC) – Part 4: Testing and measurement techniques – Section 2: Electrostatic discharge immunity test	1995 / 1998 / 2001
EN 61000-4-3 / +A1	Electromagnetic compatibility (EMC) – Part 4: Testing and measurement techniques – Section 3: Radiated, radio-frequency, electromagnetic field immunity test	2006 / 2008
EN 61000-4-4	Testing and measurement techniques – Section 4: Electrical fast transient/burst immunity test Basic EMC publication	2004
EN 61000-4-5	Electromagnetic compatibility (EMC) – Part 4: Testing and measurement techniques – Section 5: Surge immunity test	2006
EN 61000-4-6	Electromagnetic compatibility (EMC) – Part 4-6: Testing and measurement techniques – immunity to conducted disturbances, induced by radio-frequency fields	2007
CEI EN 61373	Railway applications – Rolling stock equipment – Shock and vibration tests	1999
EN 60068-2-27	Environmental testing – Part 2: Tests – Test Ea and guidance: Shock	2009
EN 60068-2-64	Environmental testing – Part 2: Test methods – Test Fh: Vibration, broad – band random (digital control) and guidance	2008
EN 60068-2-1	Environmental testing – Part 2-1: Tests – Test A: Cold	2007
EN 60068-2-2	Environmental testing – Part 2-2: Tests – Test B: Dry heat	2007
EN 60068-2-30	Environmental testing – Part 2-30: Tests – Test Db and guidance: Damp heat, cyclic (12+12 – hour cycle)	2005
EN 60529/+A1	Degrees of protection provided by enclosures (IP code)	1991 / 2000
EN 61373	Railway applications - Rolling stock equipment - Shock and vibration tests	2010
EN60077-1	Railway applications – Electric equipment for rolling stock – Part 1: General service conditions and general rules	1999

4. MAIN CHARACTERISTICS

4.1. Embedded Processor Unit

- CPU: INTEL ATOM E680 T @ 1.6 GHz
 - GMA600 @ 400 MHZ
 - 24KB/32KB CACHE L1
 - 512 KB CACHE L2
- RAM: 1 GBytes DDR2-800
- SSD: 4 Gbytes
- 1 x USB port HOST - Connector type A
- 1 x USB port HOST - Connector type B
- LAN Ethernet 10/100 Base-T port # 1 - M12 connector 4 poles - Dcoded
- Built-in piezo buzzer
- Brightness control manual/auto sensor
- 2 x Status LED
- 32 x Stainless Steel backlight keyboard according to UIC 612
- Touch Screen resistive 5 wire

4.2. Display

- LCD size: 10.4"
- Resolution: 1024x768 pixel
- Colours: 256K / 16M
- Luminance: 400 cd/m2 typ.
- Contrast: 1400:1 typ

4.3. Operating Systems

- Linux kernel 2.6.x, Fedora 14

4.4. Power Supply

- Nominal Voltage: 24VDC +/- 30%
- Power consumption: max 30W

4.5. Physical data

- Mechanical Dimensions: see DIMENSIONS
- IP rating: IP 54 on front panel

4.6. Approval/Compliances

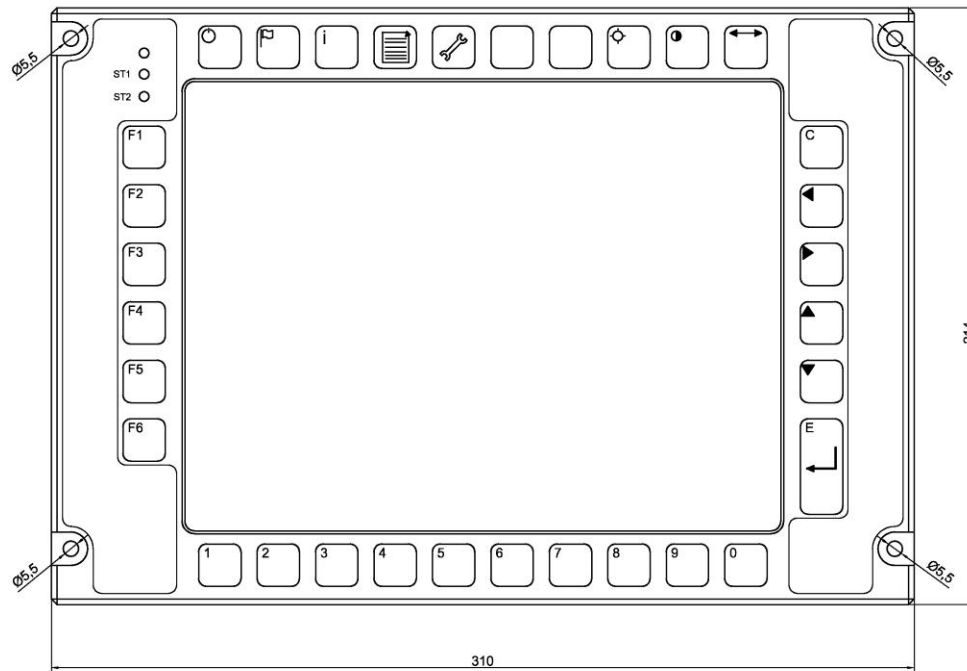
- Governing Standard:
 - EN 50155 Railway Applications
- Environmental compliance:
 - Temperature Range: -30°C/+70°C
 - Environmental test: EN60068-2-1
 - Shock & Vibration: EN 61373
 - Fire / Smoke: EN 11170-3
- EMC (Electromagnetic Compatibility)
 - EM compatibility: EN 50121-3-2
 - Elect. fast transient / Burst: 61000-4-4
 - Elect. Discharge: EN 61000-4-2
 - Radiated RF / EN field: EN 61000-4-3
 - Immunity: EN 61000-4-6

4.7. Electrical Interface

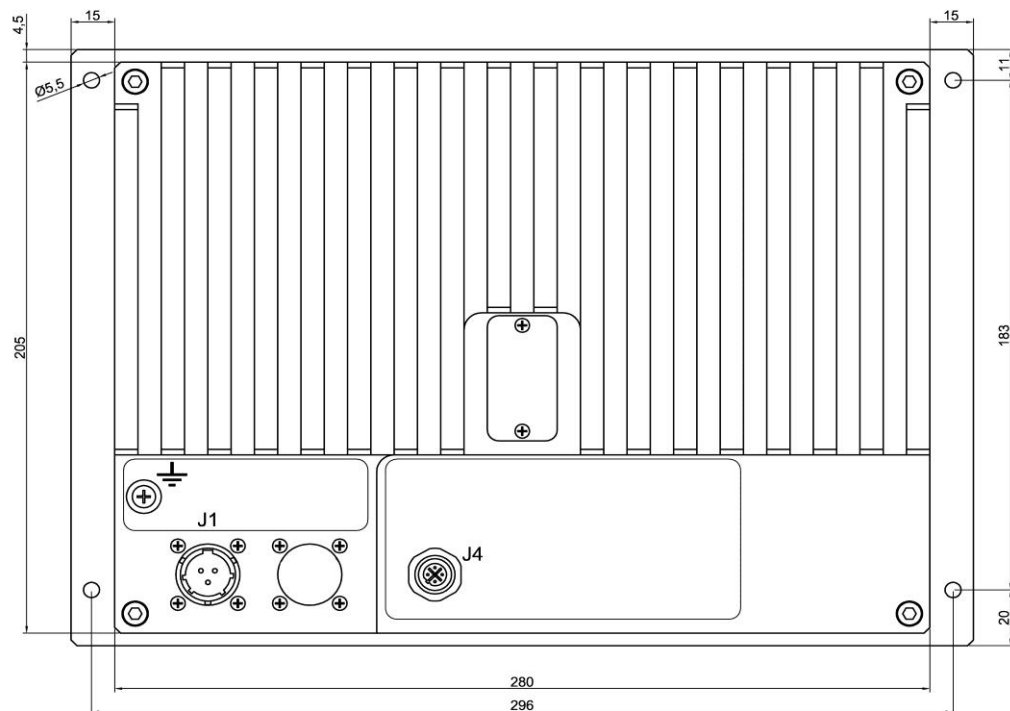
- **Nr. 1 Power supply:**
3 poles circular connector GLENAIR type FRIPT06J12-3SCF7, male gender, SPII code 642222149.
- **Nr. 1 Ethernet:**
M12 Type connector, Harting Harax 4 poles M12-L, male gender 09670090343, SPII code 6422220301.

5.DIMENSIONS

FRONT PANEL VIEW



BACK PANEL VIEW



SIDE VIEW

