

Model A80495 SGCP 4000/
MS 4000 Series Simple Grade
Crossing Predictor/Motion
Sensor shown for reference
purposes only. Actual unit
selected may vary in
mounting and features.

WAYGUARD®

SGCP 4000/MS 4000 Series Simple Grade Crossing Predictor/ Motion Sensor

Siemens SGCP 4000/MS 4000 is an electronic, microprocessor based modular system designed to reliably detect the motion of an approaching train and start the crossing warning system.

Operation of the system is based on the maximum impedance of an unoccupied track circuit, which is determined by the location of termination shunts and rate of change in impedance resulting from physical location of a train as it moves within a track circuit.

System will apply a constant current AC signal to track and measure level of the resulting voltage. These levels vary with approach track impedance, which also varies due to distance of train from the crossing.

System detects inbound motion of train and activates crossing warning equipment.

When the train has cleared crossing, system no longer senses inbound motion and allows crossing warning signal system to recover.

When a train stops before reaching crossing, or reverses direction and backs away from the crossing, system will recover after a short (programmable) time-out as inbound motion is no longer detected.

Features

- Available in single track non-redundant and redundant models.
- Uses proven GCP 4000/5000 modules. *(All of which hot swappable and interchangeable with GCP systems.)*
- Reduced system size for installation in a smaller equipment house.
- Provides a simple user interface in order to easily setup unit.
- Programming can be confirmed by an Office Configuration Check Number (OCCN) and the track calibration information can be confirmed by a Track Check Number (TCN).
- Provides a diagnostic history log and train move history log capable of interfacing to SEAR II Event Recorder/Analyzer for additional capability.
- Supports the use of an external island using a vital input.
- Transfer module can be removed and a strap can be used to force either main or standby operation without transfer module being present. *(On redundant A80490 models only.)*
- Can be configured as either a motion sensor or as a simple grade crossing predictor.

SIEMENS

Physical Data

Specification	Parameters	
SERIES DESIGNATION	MODEL A80495	MODEL A80490
Dimensions:	Compact Version	Standard Version
Height	19.09 in (48.79 cm)	14.25 in (36.20 cm)
Width	5.88 in (14.94 cm)	10.16 in (25.81 cm)
Depth	10.86 in (27.58 cm)	10.86 in (27.58 cm)
Weight:		
Empty	9.40 lb (4.26 kg)	11.80 lb (5.35 kg)
Full Complement	11.65 lb (5.28 kg)	17.13 lb (7.77 kg)

General Data

Specification	Parameters
SERIES DESIGNATION	ALL MODELS
Response Time (Rt)	5 Seconds
Relay Drive Outputs (Vo)	400 Ω - 1000 Ω load
Minimum Output Current @ MEDIUM transmit power	200 mA
Minimum Output Current @ HIGH transmit power	400 mA
Recorded I/O State Changes	3000 Minimum
Recorded Train Moves	100 Minimum

Ordering

To Order Call	Specify
1 (800) 793-7233	Assembly Number



Siemens Mobility, Inc.
One Penn Plaza
11th Floor, Suite 1100, New York, NY 10119, United States

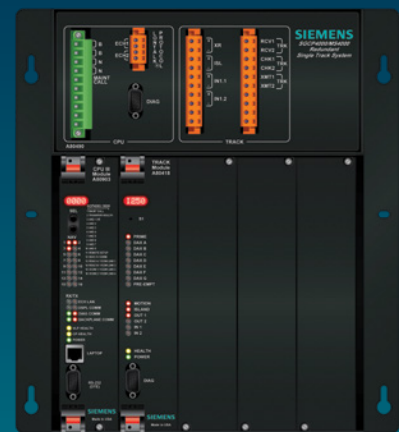
Contact for information:
Rail Infrastructure Headquarters, Homestead, PA 15120
1 (800) 793-7233, siemensmobility.us@siemens.com

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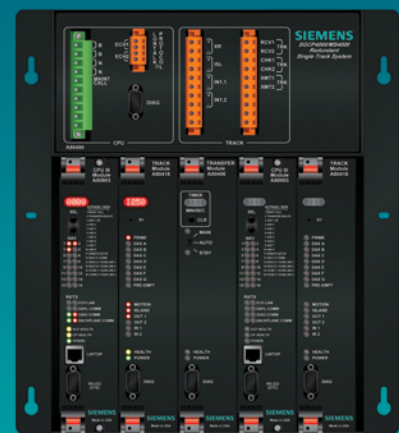
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Non Redundant 1-Track Compact SGCP 4000/MS 4000
(Assembly No. NYK:841080495000)



Non Redundant 1-Track Standard SGCP 4000/MS 4000
(Assembly No. NYK:811080490001)



Redundant 1-Track Standard SGCP 4000/MS 4000
(Assembly No. NYK:832180490001)