Mehtoob Alam
Siddhartha Sankar Thakur
Sumit Banerjee

Novel Algorithms for Detection of Line Outage using PMU

LAMBERT Academic Publishing

The primary aim of this research work is to address the different objectives such as (i) exploitation of the AC model and development of the new objective functions, (ii) utilization of current phasors exclusively instead of voltage phasors which are used by most of the existing researchers, (iii) tackling of PMU outage issues, (iv) incorporation of faulty PMU and measurement uncertainty into the mathematical models, (v) detection of parallel line outage and (vi) ensuring the cost-effectiveness of the developed models. This entire research work is accomplished phase-wise to achieve the objectives mentioned above. Firstly, the voltage phasors are used to develop the TLOD model. Secondly, the current phasors are utilized to solve the transmission line outage detection (TLOD) problem. The detection of parallel line outage is also validated for the first time using current phasor based algorithms. The effectiveness and viability of the proposed TLOD algorithms have been checked on different IEEE benchmark test systems in the MATLAB environment. The performance of the proposed TLOD models has been evaluated by computing the detection accuracy (DA).

Dr. Mahboob Alam completed B.Tech (EE) from Jalpaiguri Govt. Engg. College in 2012. He obtained M.Tech (Gold Medalist) and PhD degree from NIT Durgapur in 2018 and 2023 respectively. He has published nine research papers in peer reviewed journals, five book chapters and presented more than 20 papers in various conferences, seminars etc.

Click to open expanded view

Novel Algorithms for Detection of Line Outage using PMU Paperback – Import, 24 February 2023

by Mehebub Alam (Author), & 2 More

See all formats and editions

Paperback
₹7,101.00

8 New from ₹6,978.00

EMI starts at ₹344. No Cost EMI available EMI options

Save Extra with 2 offers

No Cost EMI: Avail No Cost EMI on select cards for orders above ₹3000 | Details

Partner Offers: Get GST invoice and save up to 28% on business purchases. Sign up for free | Details

Free Delivery | Pay on Delivery | 10 days Replacement | Amazon Delivered | Secure transaction

The primary aim of this research work is to address the different objectives such as (i) exploitation of the AC model and development of the new objective functions, (ii) utilization of current phasors exclusively instead of voltage phasors which are used by most of the existing researchers, (iii) tackling of PMU outage issues, (iv) incorporation of faulty PMU and measurement uncertainty into the mathematical models, (v) detection of parallel line outage and (vi) ensuring the cost-effectiveness of the developed models. This entire research work is accomplished phase-wise to achieve the objectives mentioned above. Firstly, the voltage phasors are used to develop the TLOD model. Secondly, the current phasors are utilized to solve the transmission line outage detection (TLOD) problem. The detection of parallel line outage is also validated for the first time using current phasor based algorithms. The effectiveness and viability of the proposed TLOD algorithms have been checked on different IEEE benchmark test systems in the MATLAB environment. The performance of the proposed TLOD models has been evaluated by computing the detection accuracy (DA).

Read less

ISBN-10	ISBN-13
6206146367	978-6206146360

Buy new: ₹7,101.00
M.R.P.: ~~₹8,877.00~~
Save: ₹1,776.00 (20%)
Inclusive of all taxes

FREE delivery **Friday, 24 November**. Details

Delivering to Kolkata 700059 - Update location

In stock

Sold by Repro Books-On-Demand and Fulfilled by Amazon.

Quantity: 1

Add to Cart

Buy Now

Secure transaction

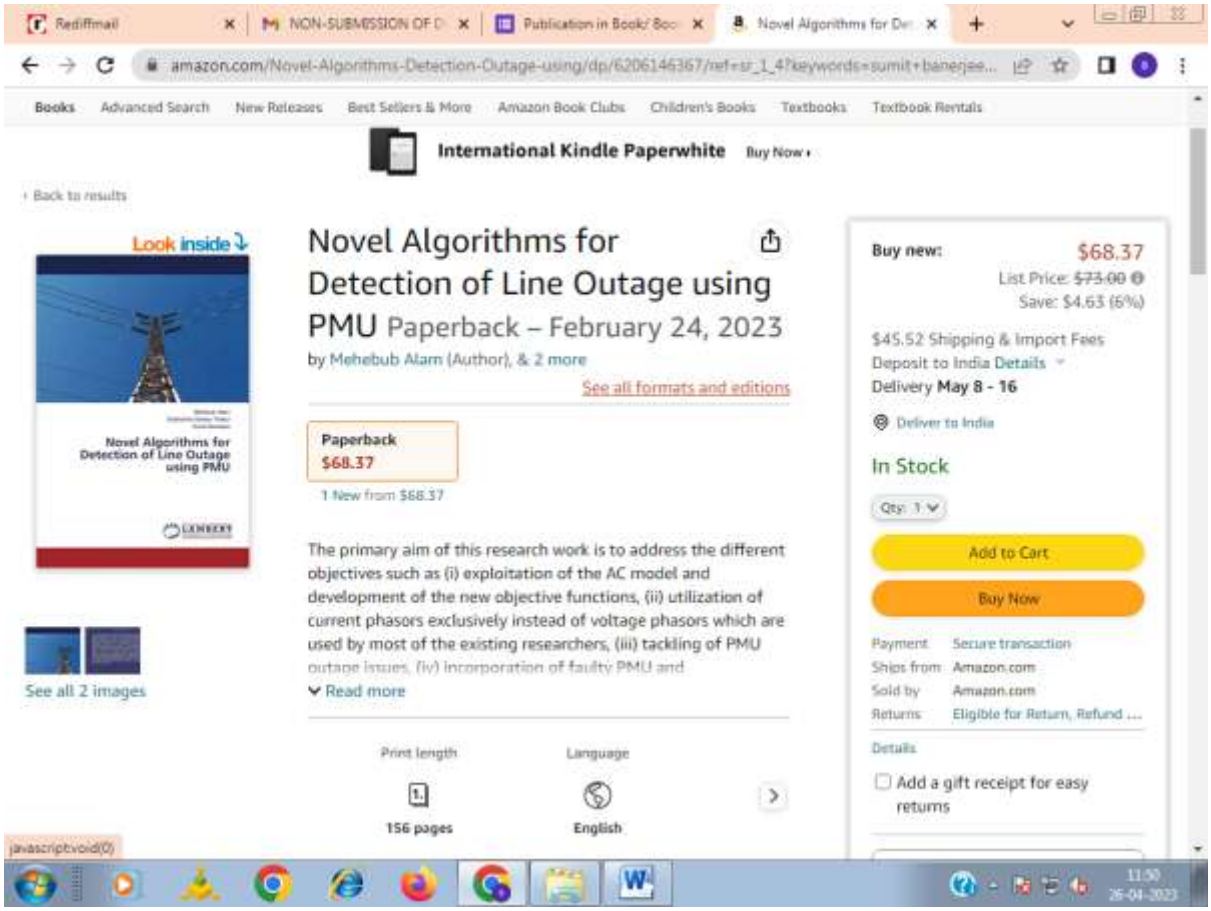
Add gift options

Add to Wish List

New (8) from ₹6,978.00 + ₹66.00 Delivery charge

Product details

Publisher : LAP Lambert Academic Publishing (24 February 2023)
Language : English
Paperback : 156 pages
ISBN-10 : 6206146367
ISBN-13 : 978-6206146360
Item Weight : 236 g
Dimensions : 15 x 0.91 x 22 cm
Country of Origin : India


Rediffmail
NON-SUBMISSION OF D
Publication in Book/ Boo
Novel Algorithms for De
amazon.com/Novel-Algorithms-Detection-Outage-using/dp/6206146367/ref=sr_1_4?keywords=sumit+banerjee...
Books
Advanced Search
New Releases
Best Sellers & More
Amazon Book Clubs
Children's Books
Textbooks
Textbook Rentals
International Kindle Paperwhite
Buy Now ›
‹ Back to results
Look inside
Novel Algorithms for Detection of Line Outage using PMU
LAMBERT
See all 2 images
Novel Algorithms for Detection of Line Outage using PMU Paperback – February 24, 2023
by Mehebub Alam (Author), & 2 more
See all formats and editions
Paperback
$68.37
1 New from $68.37
The primary aim of this research work is to address the different objectives such as (i) exploitation of the AC model and development of the new objective functions, (ii) utilization of current phasors exclusively instead of voltage phasors which are used by most of the existing researchers, (iii) tackling of PMU outage issues, (iv) incorporation of faulty PMU and
Read more
Print length
156 pages
Language
English
Buy new:
$68.37
List Price: $73.00
Save: $4.63 (6%)
$45.52 Shipping & Import Fees
Deposit to India Details
Delivery May 8 - 16
Deliver to India
In Stock
Qty: 1
Add to Cart
Buy Now
Payment
Secure transaction
Ships from
Amazon.com
Sold by
Amazon.com
Returns
Eligible for Return, Refund ...
Details
Add a gift receipt for easy returns
javascript:void(0)
11:50
26-04-2023